SIGNIFICANT AMBIGUITY IN THE NPT: A CONTINUING ISSUE

David S. Jonas*

TABLE OF CONTENTS

I.	INTRODUCTION	38
II.	HISTORY OF ARTICLE II	44
III.	THE AMBIGUITY ISSUE	45
IV.	 WHY WASN'T THE ARTICLE II PROBLEM ADDRESSED?	52 54 56
V.	CASE STUDY-GERMAN NUCLEAR PROGRAM SONDERWEG	60
VI.	ADDRESSING ARTICLE II NOW A. Amending the NPT to Clarify Article II Is Probably Not Feasible Either Politically or Procedurally	
VII.	CONCLUSION	65

^{*} Senior Executive Service, Director, Legal Strategy and Analysis, U.S. Department of Energy, Office of the General Counsel; Former General Counsel, National Nuclear Security Administration; Adjunct Professor of Law, Georgetown University Law Center and George Washington University Law School; Distinguished Research Fellow and Lecturer, U.S. Naval War College. B.A., Denison University; J.D., Wake Forest University School of Law; LL.M., The Judge Advocate General's School, U.S. Army; LL.M., Georgetown University Law Center. The author previously served in the U.S. Marine Corps, concluding his service with the Joint Chiefs of Staff as the nuclear nonproliferation planner. The views expressed herein are his own and do not necessarily reflect the official policy or position of the U.S. Department of Energy, the National Nuclear Security Administration, the Department of the Navy, or the U.S. Government. The author wishes to thank Kimia Solaimanishad and Alex Giannattasio for their outstanding research assistance in the preparation of this Article.

I. INTRODUCTION

The Nuclear Nonproliferation Treaty (NPT or Treaty) is the most widely subscribed to and successful arms control treaty in existence, with 190 states party to the Treaty.¹ It is the foundation and cornerstone of the nuclear nonproliferation regime and has withstood the tests of time and changed circumstance. The NPT is fundamentally sound but suffers from an unfortunate lack of clarity in certain areas. The subject of this Article concerns the possibility that a non-nuclear weapons state (NNWS) party to the NPT might argue that the Treaty's Article II permits NNWSs to assist other states or non-state actors in developing nuclear weapons without violating the Treaty.² This remarkable state of affairs exists because Article II fails to directly address the possibility of NNWSs providing assistance in obtaining a nuclear weapon to other NNWSs due to the singular role assigned by the NPT to nuclear weapons states (NWSs) and NNWSs as suppliers and consumers, respectively and exclusively.³ For a variety of reasons, this will likely remain a theoretical issue, since it is admittedly hard to imagine an NNWS party to the NPT arguing that it was permitted to assist a non-party to develop weapons. Rather, the NNWS would likely argue that it did not, in fact, provide such assistance or that such assistance did not, in fact, benefit a nuclear weapons program.

Before delving into that specific issue, it is important to understand that it will be considered within the contextual ambiguity of the NPT itself. Other problems exist in the NPT due to the lack of specificity and precision in its terms, which is often the end result of multilateral negotiations. A challenge frequently discussed and of great concern today is that the NPT allows an NPT state party, while in technical compliance with the Treaty's provisions, to acquire nuclear material, equipment, and technology from other NPT parties to master the nuclear fuel cycle, and then, later, legally withdraw

¹ Treaty on the Non-Proliferation of Nuclear Weapons, *opened for signature* July 1, 1968, 21 U.S.T. 483, 729 U.N.T.S. 161 [hereinafter Non-Proliferation Treaty]; *see also* G.A. Res. 1380 (XIV), U.N. Doc. A/RES/1380(XIV) (Nov. 20, 1959); G.A. Res. 2373 (XXII), U.N. Doc. A/RES/2373(XXII) (June 12, 1968). For an article presenting possible scenarios for bringing the four states not party to the NPT that are believed to possess nuclear weapons, which are India, Israel, Pakistan, and North Korea (having acceded, but subsequently withdrawing), see David S. Jonas, *Variations on Non-Nuclear: May the "Final Four" Join the Nuclear Nonproliferation Treaty as Non-Nuclear Weapon States While Retaining Their Nuclear Weapons?*, 2005 MICH. ST. L. REV. 417.

² This legal option is now foreclosed, albeit not by the NPT itself, but by UN Security Council Resolution 1540. S.C. Res. 1540, para. 1, U.N. Doc. S/RES/1540 (Apr. 28, 2004).

³ See Mohamed I. Shaker, The Nuclear Non-Proliferation Treaty: Origin and Implementation, 1959–1979, at 262 (1980).

from the Treaty.⁴ North Korea, often accused of this violation, is not a good example of this; it acquired very little legally under the NPT, and none of those acquisitions contributed to its nuclear weapons program.⁵ It relied, rather, on indigenous development and black market acquisitions.⁶ Several years ago, the former Director General of the International Atomic Energy Agency (IAEA), Mohamed ElBaradei, called for this significant issue to be addressed, by noting his belief that it was time to limit the production of weapons-usable materials in civilian nuclear programs, as well as the manufacture of new material via enrichment and reprocessing, by restricting these functions to facilities under international control.⁷

To date, states like Iran⁸ and North Korea⁹ have not built their nuclear weapons programs through open trade consistent with the NPT, but rather

⁵ See JOSEPH CIRINCIONE, BOMB SCARE: THE HISTORY AND FUTURE OF NUCLEAR WEAPONS 38 (2007) (noting that the "global nuclear black market" established by Pakistani nuclear scientist Abdul Qadeer Khan "provided equipment to Iran, Libya, North Korea and perhaps other nations beginning in the 1980s"); see also Thomas L. Neff, Ctr. for Int'l Studies, Mass. Inst. of Tech., The Nuclear Fuel Cycle and The Bush Nonproliferation Initiative, Address at the World Nuclear Fuel Cycle 2004, at 7 (Apr. 1, 2004) (transcript available at http://www.ia ea.org/newscenter/focus/fuelcycle/neff.pdf) ("[T]he fact is that the civilian fuel cycle has not been a significant contributor to proliferation. Those nations that wanted nuclear weapons have gone straight for them. Israel, India and North Korea used research reactors.").

⁸ Neff, *supra* note 5, at 7 ("Iran spent nearly twenty years on a clandestine enrichment program but only when this program was discovered did it claim it was for civilian purposes."); *see generally* S.C. Res. 1929, U.N. Doc. S/RES/1929 (June 9, 2010) (summarizing the multiple violations of the current international nonproliferation regime by the Iranian government).

⁹ Spector, *supra* note 4, at 627 ("Sadly, Iran is not the only country engaged in suspicious [weapon of mass destruction] activities that has defied the U.N. Security Council in recent years. Most prominently, after North Korea's first nuclear test in October 2006, the Council adopted a binding resolution, again under Chapter VII of the U.N. Charter, that required North

⁴ See Leonard S. Spector, Slowing Proliferation: Why Legal Tools Matter, 34 VT. L. REV. 619, 624 (2010) ("[T]here are legitimate reasons for countries to have enrichment or reprocessing capabilities, since both can be used to produce fuel for nuclear power reactors. Unfortunately, if a state develops these plants, it can build a stockpile of material that is very close to what is needed for a bomb. If it were to suddenly pull out of the NPT and tell the [International Atomic Energy Agency] to go home and if it had prepared non-nuclear components for nuclear weapons in advance, it could produce nuclear arms in a matter of weeks, under some scenarios."). For more on issues surrounding the nuclear fuel cycle, see Christopher E. Paine, The Nuclear Fuel Cycle, Global Security, and Climate Change: Weighing the Costs and Benefits of Nuclear Power Expansion, 44 U. RICH. L. REV. 1047, 1048 n.4 (2010) ("Unfortunately, the dual military-civil potential of nuclear fuel cycle facilities creates an inherent tension between the exercise of this inalienable right and the nonproliferation of nuclear weapons."); see also Milagros Álvarez-Verdugo, Will Climate Change Alter the NPT Political Balance? New Challenges for the Non-Proliferation Regime, 21 EUR. J. INT'L L. 205, 206-11, 215 (2010) (focusing on the possibility of implementing a multilateral system for uranium enrichment and nuclear fuel recycling).

⁶ See supra note 5.

⁷ Mohamed ElBaradei, *Towards a Safer World*, ECONOMIST, Oct. 18, 2003, at 47.

through clandestine development in violation of the NPT and denial of IAEA access to evaluate their programs fully. Nevertheless, the Obama Administration is working hard to address both the spread of sensitive nuclear technologies and the potential for abuse of the withdrawal provision of the NPT.¹⁰ During the U.S. ratification process, however, the administration advised the Senate that the right to withdrawal would be self-judging.¹¹

The President has made nuclear security a centerpiece of his policy agenda as evidenced by his Prague speech¹² which set forth the administration's nonproliferation and disarmament agenda. Additionally, the Administration sponsored the first Nuclear Security Summit¹³ (conducted at the head of state level), pushed for a successful NPT 2010 Review Conference,¹⁴ and most recently, was active at the UN First Committee¹⁵ and the General Conference of the IAEA.¹⁶

¹¹ See Antonio F. Perez, Survival of Rights Under the Nuclear Non-Proliferation Treaty: Withdrawal and the Continuing Right of International Atomic Energy Agency Safeguards, 34 VA. J. INT'L L. 749, 792–95 (1994) ("At a minimum, then, at least with respect to its representations to the Congress, the Executive Branch did not argue that there were legal limits on a state's right to withdraw from the NPT."); see also id. at 794 n.134 (quoting Nonproliferation Treaty: Hearings Before the Senate Committee on Foreign Relations, 91st Cong., 1st Sess., pt. 2, 367–68 (1969)).

¹² See Obama Prague Speech, supra note 10.

¹³ Nuclear Security Summit, U.S. DEP'T STATE, http://www.state.gov/nuclearsummit (last visited Nov. 21, 2011).

¹⁵ Rose Gottemoeller, Assoc. Sec'y, U.S. Bureau of Arms Control, Remarks to the First Committee of the United Nations General Assembly (Oct. 4, 2011) (transcript available at http://geneva.usmission.gov/2011/10/05/first-committee/).

⁶ Steven Chu, U.S. Sec'y of Energy, Statement to the 2011 IAEA General Conference

Korea to eliminate its nuclear weapon program and rejoin the NPT, from which it had withdrawn in 2003. The Resolution also imposed an international embargo on conventional arms transfers and nuclear- and missile-related transfers to Pyongyang. But North Korea, as we know, disregarded these demands, continuing its nuclear weapon program and last May conducting a second nuclear test. The Council shortly afterward adopted a further resolution, imposing additional sanctions on North Korea and again demanding that North Korea end its nuclear weapon program, so far to no avail.").

¹⁰ Barack Obama, U.S. Pres., Remarks in Hradcany Square in Prague (Apr. 5, 2009) [hereinafter Obama Prague Speech] (transcript available at http://www.whitehouse.gov/the_pr ess_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered/) ("We need real and immediate consequences for countries caught breaking the rules or trying to leave the [NPT] without cause.").

¹⁴ See 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, UNITED NATIONS, http://www.un.org/en/conf/npt/2010 (last visited Dec. 7, 2011) (providing information related to the conference); see also Hillary Clinton, Sec'y of State, U.S., Statement to the 2010 Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons (May 3, 2010) (transcript available at http://www.un.org/en/conf/npt/201 0/statements/pdf/usa_en.pdf) (emphasizing the Obama Administration's commitment to reducing the threat of nuclear weapons).

Another area of the NPT that a non-party state might seek to exploit is the fact that the term NNWS is not defined in the treaty.¹⁷ Even though it is presumed from the text of the NPT that NNWSs are states that do not possess nuclear weapons, this lack of a precise definition could potentially allow non-party states to argue that they should be able to accede to the NPT as an NNWS while retaining their nuclear weapons, since Article II does not expressly prohibit "possession" of nuclear weapons.¹⁸ The United States would reject such an argument, viewing it as incompatible with the provisions of the NPT as well as its object and purpose¹⁹ to prevent the spread of nuclear weapons. In all likelihood, other NPT parties would take the same view. For that reason, a non-party would not be likely to advance such an argument. However, absent a precise definition of the term NNWS in the Treaty, the possibility of such a "creative" legal argument cannot be ruled out entirely.²⁰

This Article takes an in-depth look at a lack of clarity within Article II of the NPT which has historically been overlooked by the major world powers, but which could become a very real problem, particularly given the current international increase in nuclear trade and export, which could continue, particularly if the predicted "nuclear renaissance"²¹ comes to pass. Indeed, many states such as the United Arab Emirates, Jordan, India, and Saudi Arabia are clearly embracing nuclear power.²² However, the current nuclear crisis in Japan is making such a renaissance look much less likely.²³

¹⁷ Jonas, *supra* note 1, at 442.

¹⁹ Non-Proliferation Treaty, *supra* note 1, arts. I–II. Additionally, State Department lawyers confirmed this view in conversations in March 2011.

²⁰ See Jonas, *supra* note 1, at 441–50 for an example of this type of argument.

²¹ Given the concern with global warming and nuclear power as the only fuel that does not generate carbon, many have predicted an abundance of new nuclear plants in the coming decades.

²² See Ayesha Daya, Nuclear Energy Program Supported by 85% of U.A.E. Residents, BLOOMBERG (June 16, 2011), http://www.bloomberg.com/news/2011-06-16/nuclear-energy-p rogram-supported-by-85-of-u-a-e-residents.html (discussing U.A.E. citizens' support for development of nuclear power plants).

²³ See Matthew L. Wald, 'Zombie Reactor' in U.S. Being Brought Back to Life, INT'L HERALD TRIB., June 17, 2011, at 18 ("Since an earthquake and tsunami unleashed a nuclear disaster at the Fukushima Daiichi reactors in Japan in March, several countries have distanced themselves from nuclear energy. The German chancellor announced her intention to close all of the country's nuclear facilities by 2022, and the Swiss Parliament is heading in the same

⁽Sept. 19, 2011) (remarks as prepared for delivery available at http://energy.gov/downloads/se cretary-steven-chu-remarks-prepared-delivery-2011-iaea-general-conference).

¹⁸ See Non-Proliferation Treaty, *supra* note 1, art. II (placing express prohibitions on the transfer, manufacture, acquisition, and receipt of aid in the manufacture or acquisition of a nuclear weapon or explosive device, but not mentioning possession); *see also* Jonas, *supra* note 1, at 442 ("[N]othing in the NPT explicitly prohibits a non-NPT NNWS from possessing nuclear weapons upon accession to the NPT.").

It may be argued that Article II permits NNWSs to assist other states, or non-state actors, in developing nuclear weapons without violating the terms of the Treaty. Although Article II has other imperfections—such as the lack of a definition of "manufacture" and a clear meaning of weaponization activities²⁴ —this lack of clarity, which may be argued to permit NNWSs to supply others with nuclear weapons technology, should be troubling to those concerned with proliferation. Any horizontal proliferation, i.e., increase in the number of states possessing nuclear weapons, is particularly insidious given the historical patterns of weapons acquisition.²⁵

This concern regarding transfer goes beyond the strictly academic. Most states with civil nuclear power programs possess advanced knowledge of the nuclear fuel cycle and have, as a consequence, acquired an understanding of critical portions of the weaponization process.²⁶ Several NNWSs either possessed or considered active nuclear weapon programs at some point in recent history. States such as Sweden, Switzerland, Brazil, and Argentina were among those that considered nuclear weapons programs.²⁷ Several others, such as South Africa, Belarus, Ukraine, and Kazakhstan, had possession of operational nuclear weapons, but voluntarily acceded to the

²⁵ See CIRINCIONE, supra note 5, at 102–09 (discussing the nuclear ambitions of several states); see also Keith L. Sellen, *The United Nations Security Council Veto in the New World Order*, 138 MIL. L. REV. 187, 222 (1992) ("In addition to terrorism, arms proliferation causes tensions for many reasons. A state naturally creates tensions by building military strength for its own security because, by doing so, it concomitantly raises its neighbors' fears. Regional powers also can create tensions in their attempts to balance the need for regional security with the community's interest in preventing arms proliferation. Similarly, states that produce arms create tensions by pitting manufacturers' and suppliers' desires for profits against the community's desire to prevent proliferation.").

²⁶ See Michael V. Hynes et al., *Denying Armageddon: Preventing Terrorist Use of Nuclear Weapons*, 607 AM. ACAD. POL. & SOC. SCI., ANNALS, 150, 154 (2006) ("Reactors and associated technologies also create a cadre of individuals skilled in the nuclear area, some of whom might aid a nuclear weapons program for radical reasons or personal gain.").

 27 See CIRINCIONE, supra note 5, at 25, 32 (noting that Argentina and Brazil "benefited from the [Atoms for Peace] program and used it as a springboard to build, or attempt to build, nuclear weapons," while Sweden and Switzerland engaged in "prolonged internal debate" before deciding not to pursue nuclear weapons).

direction. A modern reactor project in Texas was canceled after Fukushima, and one in Maryland fell apart last year. And even before the catastrophe in Japan, the nuclear industry as a whole had been suffering from a surfeit of generating capacity, the low price of natural gas and the high price of construction."); *see also* Roland M. Frye, Jr., *The Current "Nuclear Renaissance" in the United States, Its Underlying Reasons, and Its Potential Pitfalls, 29* ENERGY L.J. 279, 372 (2008) ("Another kind of catastrophe that could scuttle the nuclear renaissance would be a serious radioactive release from a plant due to damage from an earthquake, hurricane, or tornado.").

²⁴ See Mary Beth Sheridan & Colum Lynch, *Obama Hopeful of Broad Support for Further* U.N. Sanctions on Iran, WASH. POST, Apr. 3, 2010, at A5 (discussing the debate over possible sanctions against Iran based on accusations of pursuit of nuclear weapons).

NPT which required relinquishing those weapons.²⁸ All of those states, and many others, now have the requisite knowledge and ability to assist another state in its pursuit of nuclear weapons if they chose to do so.

Parties outside the NPT regime tend to be somewhat isolated from international diplomacy, at least in the disarmament arena, and thus pose greater proliferation risks when they attain nuclear weapons capabilities in that they are not bound by any of the nonproliferation commitments undertaken by NPT states parties.²⁹ They are often more likely to participate in swaps of nuclear weapons technology in order to meet other requirements in non-nuclear areas and for diplomatic reasons.³⁰ Further, proliferation rarely occurs in isolation.³¹ When one state acquires a nuclear weapon, other states in the region often react to level the playing field.³²

In short, use of the Article II ambiguity could create an amplification problem: NNWS recipients could become suppliers themselves and parties could withdraw from the NPT to counter power imbalances.

In order to provide a better understanding of the effects of the lack of clarity and the importance of finding ways to address it, this Article will analyze the evolution of the NPT, particularly Article II, during the drafting conference, and discuss how Article II ultimately contained this deficiency. This Article will then present theories as to why the ambiguity was not resolved during the drafting conferences despite being brought to the attention of the drafters. To demonstrate the potentially serious ramifications

²⁸ See Winston P. Nagan, Nuclear Arsenals, International Lawyers, and the Challenge of the Millennium, 24 YALE J. INT'L L. 485, 509 (1999) ("Although it has the raw materials and technical capacity to produce nuclear weapons, South Africa has set the example for Africa: It neither wants nuclear weapons, nor does it want to make or deploy them."); see also Wendy L. Mirsky, Comment, The Link Between Russian Organized Crime and Nuclear-Weapons Proliferation: Fighting Crime and Ensuring International Security, 16 U. PA. J. INT'L BUS. L. 749, 777 (1995) ("[U]nder the NPT, Ukraine, Belarus, and Kazakhstan have agreed to transfer many of their nuclear warheads to Russia.").

²⁹ See, e.g., DAVID ALBRIGHT, INST. FOR SCI. & INT'L SECURITY, SOUTH AFRICA'S SECRET NUCLEAR WEAPONS 8 (1994), *available at* http://isis-online.org/isis-reports/detail/south-africa s-secret-nuclear-weapons/ (detailing alleged South African nuclear technology exchanges with Israel).

 $^{^{30}}$ Id.

³¹ See generally ELIZABETH BAKANIC ET AL., PREVENTING NUCLEAR PROLIFERATION CHAIN REACTIONS: JAPAN, SOUTH KOREA, AND EGYPT (2008), *available at* http://www.princeton.edu/research/pwreports_f07/wws591f.pdf (discussing factors that would induce each country to pursue development of nuclear weapons).

³² See CIRINCIONE, supra note 5, at 103 ("[W]hat a state like Iran might see as a defensive move would provoke dangerous reactions from other states in the region. A nuclear reaction chain could ripple through a region and across the globe, triggering weapon decisions in several, perhaps many, other states."). One might also look to recent history in Iraq, Syria, and Iran.

of this problem, a case study will be presented illustrating its relevance. Finally, the Article will offer proposals for addressing it.

II. HISTORY OF ARTICLE II

On December 20, 1961, the United Nations (UN) sponsored the Eighteen Nation Disarmament Conference (ENDC)³³ in Geneva, Switzerland, in which the United States and the Soviet Union were to lead the negotiations for a comprehensive arms control and disarmament treaty that was to become known as the NPT.³⁴ Pursuant to this Treaty, NWSs agreed to: refrain from spreading nuclear weapons and related technology to NNWSs;³⁵ recognize the right of NNWSs to the peaceful uses of nuclear energy and assist in that pursuit;³⁶ and pursue nuclear disarmament negotiations in good faith.³⁷ These commitments were made in exchange for an agreement from NNWSs to refrain from developing nuclear weapons.³⁸ At its core, this " 'Grand Bargain' of the NPT guarantees all [NNWSs] party to the NPT the benefits of the peaceful uses of nuclear energy" and in turn requires the NWSs to negotiate in good faith toward nuclear disarmament.³⁹

However, the negotiations establishing the NPT were anything but swift and congenial.⁴⁰ The United Nations General Assembly (UNGA) announced on November 19, 1965, the underlying principles that should govern the establishment of a disarmament and nonproliferation treaty in an attempt to expedite the drafting process.⁴¹ The UNGA listed first among these guiding principles the critical need that "[t]he treaty should be void of any loop-holes which might permit . . . non-nuclear Powers to proliferate, directly or indirectly, nuclear weapons in any form."⁴² And yet, Article II of the NPT, the core obligation for NNWSs, contains precisely such a deficiency by

⁴¹ G.A. Res. 2028 (XX), para. 2, U.N. Doc. A/6014 (Nov. 19, 1965), *reprinted in* U.S. ARMS CONTROL & DISARMAMENT AGENCY, DOCUMENTS ON DISARMAMENT 1965, at 532 (1966); *see also* DANIEL H. JOYNER, INTERNATIONAL LAW AND THE PROLIFERATION OF WEAPONS OF MASS DESTRUCTION 6–7 (2009) (discussing the UN's proposed principles).

⁴² G.A. Res. 2028 (XX), *supra* note 41, para. 2.

³³ Also referred to as the Eighteen Nation Committee on Disarmament (ENCD).

³⁴ G.A. Res. 1722 (XVI), pt. II, U.N. Doc. A/4980 (Dec. 20, 1961).

³⁵ Non-Proliferation Treaty, *supra* note 1, art. 1.

³⁶ *Id.* art. IV.

³⁷ *Id.* art. VI.

³⁸ *Id.* art. II.

³⁹ David S. Jonas, *The Comprehensive Nuclear Test Ban Treaty: Current Legal Status in the United States and the Implications of a Nuclear Test Explosion*, 39 N.Y.U. J. INT'L L. & POL. 1007, 1012 (2007).

 ⁴⁰ See U.S. ARMS CONTROL & DISARMAMENT AGENCY, ARMS CONTROL AND DISARMAMENT
 AGREEMENTS 83–86 (6th ed. 1984) (discussing the NPT negotiation process).
 ⁴¹ G.A. Res. 2028 (XX), para. 2, U.N. Doc. A/6014 (Nov. 19, 1965), reprinted in U.S.

2011]

failing to address the possibility of NNWS transfers of nuclear weapons technology.⁴³ Of course, there might be a violation of NPT Article III by such activity.⁴⁴

III. THE AMBIGUITY ISSUE

In many ways, the Article II ambiguity, which could operate to the detriment of the NPT, reflects an overly simplistic framing of the nonproliferation bargain. At the time the NPT was drafted, NWSs were viewed as holding the key to nuclear weapons.⁴⁵ Thus, the NPT may be read as imposing negative supply-side obligations on the NWSs under Articles I and IV. Article I directly obliges NWSs to not "transfer . . . nuclear weapons or other explosive devices," nor "assist, encourage, or induce" NNWSs to acquire nuclear weapons.⁴⁶ Although the NPT does not explicitly name the NWSs, it is a clearly defined term by comparison to the undefined term "NNWS." NWS is defined by temporal circumstance in Article IX as a state that "has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967."⁴⁷ Coincidentally, that group is the same as the Permanent Five members of the UN Security Council: U.S, UK, France, Russia, and China.⁴⁸

It is understood that, as keepers of advanced nuclear technology, NWSs have a special opportunity to contribute to the development of nuclear energy in NNWSs under Article IV.⁴⁹ Compared to NWSs, under the NPT, NNWSs are viewed as consumers who lack, but desire nuclear technology. Thus, NNWSs may be similarly viewed as subject to demand-side obligations in

⁴³ See Non-Proliferation Treaty, *supra* note 1, art. II (prohibiting NNWSs from seeking or receiving nuclear weapons while failing to expressly prohibit possession).

⁴⁴ See id. art. III, para. 1 ("Each non-nuclear-weapon State Party to the Treaty undertakes to accept safeguards... with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices.").

⁴⁵ Richard L. Williamson, Jr., *Law and the H-Bomb: Strengthening the Nonproliferation Regime to Impede Advanced Proliferation*, 28 CORNELL INT'L L.J. 71, 131 (1994).

⁴⁶ Non-Proliferation Treaty, *supra* note 1, art. I.

⁴⁷ *Id.* art. IX, para. 3.

⁴⁸ Christopher C. Joyner & Alexander Ian Parkhouse, *Nuclear Terrorism in a Globalizing World: Assessing the Threat and the Emerging Management Regime*, 45 STAN. J. INT'L L. 203, 214 (2009) ("Nuclear weapons are held by the five permanent members of the UN Security Council, as well as by India, Israel, Pakistan, and North Korea.").

⁴⁹ See Non-Proliferation Treaty, *supra* note 1, art. IV, para. 2 ("All the Parties to the Treaty undertake to facilitate . . . the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy. Parties to the Treaty in a position to do so shall also co-operate in contributing . . . to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of [NNWSs] Party to the Treaty").

Articles II and III. Additionally, the NPT subtly differentiates between NNWSs and NNWSs party to the Treaty by using both terms in reference to NNWSs in different Articles of the Treaty. For example, Article I prohibits NWSs from sharing nuclear weapons with "any [NNWS]" as opposed to merely NNWSs party to the NPT.⁵⁰ Article II, conversely, specifically refers to NNWS party to the Treaty.⁵¹

Article II, in short, forbids NNWSs party to the NPT from receiving, manufacturing, and acquiring nuclear weapons. Indeed, the term "not to seek" assistance in the manufacture of nuclear weapons means not to make an effort anywhere, including seeking assistance from non-NPT signatories, non-state actors, or even NWSs. With this, the NPT restrictions can be read quite broadly. Article II states:

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.⁵²

Article III ensures that the obligations in Article II are fulfilled, by requiring NNWSs to accept IAEA safeguards (methods used by the IAEA to ensure that no diversion of nuclear material takes place from peaceful nuclear programs to weapons programs such as cameras, tags, seals, and inspections) in order to prevent the "diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices."⁵³ By dividing state parties to the NPT into haves and have-nots, and then attributing a singular role to each, the NPT, remarkably, does not directly address the possibility that NNWSs could be supply-side actors that furnish nuclear weapons technology or material to other states.

Article II presents proliferation solely as a problem of NNWSs attempting to gain nuclear weapons. Noticeably absent from these obligations is any prohibition on transferring nuclear weapons technology or assisting in the development of such technology. The failure to address the potential of NNWSs to perform a supply-side role leaves a significant legal and policy

⁵⁰ *Id.* art. I.

⁵¹ *Id.* art. II.

⁵² *Id.*

⁵³ *Id.* art. III, para. 1.

gap in the NPT. By this glaring and inexplicable omission in Article II, an NNWS might argue that it is permitted to lawfully assist another state or a non-state actor in acquiring nuclear weapons without violating the terms of the Treaty. Again, such activity might violate Article III.

Were such assistance to be provided to another NNWS party to the NPT, the state receiving such assistance would be in violation of its Article II obligations. However, a number of scenarios exist where neither party would necessarily be in violation of the NPT. If an NNWS were to provide indigenously developed nuclear weapons expertise to a non-state actor or to a state not a party to the Treaty, the NPT party might argue that neither the provider nor the recipient of the assistance would be in violation of the NPT. Since the NPT focus is on states, it does not apply to non-state actors, but non-state actors are relevant in many plausible threat scenarios today.⁵⁴ In summary, the core infirmity of the Article II ambiguity is that the NNWS party to the NPT that is providing the assistance to the nuclear weapons program of another state, entity, or group would be able to argue that it is not in violation of Article II.

Despite being the most widely accepted arms control treaty in history, a small number of states are not party to the NPT.⁵⁵ NNWSs could theoretically assist such states in developing nuclear weapons with impunity, although NNWSs party to the NPT could not legally receive such assistance.

⁵⁴ Joseph Cirincione, former director of nonproliferation at the Carnegie Endowment for International Peace, has called "[t]he danger of nuclear terrorism... the most serious threat" of the early twenty-first century. CIRINCIONE, *supra* note 5, at 87; *see also id.* at 89–95 (asserting that "the most serious threat" comes from non-state actors bent on committing acts of terrorism by exploiting a variety of nuclear sources, from civilian stockpiles to neglected Cold War weapons stores).

NPT (In Alphabetical Order), UNITED NATIONS, http://disarmament.un.org/TreatyStatus. nsf/NPT%20(in%20alphabetical%20order)?OpenView (last visited Dec. 8, 2011) (states not party to the NPT are Israel, Pakistan, India, and North Korea). As a separate issue, Taiwan deserves mention here although it does not possess nuclear weapons. While it is not a state in the UN context, it certainly should qualify as a state otherwise. As a matter of international law, it fits the criteria, but due to the political strength of the People's Republic of China, attempts by Taiwan to obtain official statehood have failed. Mark S. Zaid, Taiwan: It Looks Like It, It Acts Like It, but Is It a State? The Ability to Achieve a Dream Through Membership in International Organizations, 32 NEW ENG. L. REV. 805, 806 (1998). But regardless of geopolitics, Taiwan is as likely an entity as any to be tempted to pursue a nuclear weapons program, particularly if the U.S. were for some reason to weaken its policy commitments to Taiwan or if hostilities in Asia were to flare up again. Recent Legislation, Foreign Relations Law – Nuclear Nonproliferation – Congress Authorizes the President To Waive Restrictions on Nuclear Exports to India. – Henry J. Hyde United States–India Peaceful Atomic Energy Cooperation Act of 2006, Pub. L. No. 109-401, tit. I, 120 Stat. 2726 (to be codified at 22 U.S.C. §§ 2652c, 8001-8008, and 42 U.S.C. § 2153(d)), 120 HARV. L. REV. 2020, 2026 (2007).

The problem is compounded by the fact that states may withdraw from the NPT with relative ease. 56

This ability to withdraw opens the unsettling possibility that the number of states not subject to the NPT's obligations could rise, increasing the number of states that NNWSs could assist without either state contravening the NPT. Further, nothing in the NPT generally, or in Article II specifically, regulates non-state actors, in that they are not bound by the Treaty. Although such non-state actors may be subject to other laws, if assistance were given to these groups or individuals, the assisting NNWS might argue that neither it nor the receiving non-state actor violated the NPT. These possibilities for proliferation reveal a significant flaw in the drafting of Article II.

While non-state actors may seem irrelevant in the NPT context, since such actors have no status under the Treaty, although the state where the non-state actor resided could be technically responsible, non-state actors did not represent credible and persistent threats when the NPT was drafted, but they do now. Article I refers to "any recipient" whatsoever while Article II prohibits seeking or receiving any assistance of any kind.⁵⁷ In that sense, non-state actors, while not given a duty under the Treaty, are duly noted and may not serve as a lawful source of proliferation materials.

Significantly, none of the original drafts of the NPT contained this Article II issue. In the first draft of Article II, issued in August of 1965 to the ENDC, the United States included provisions that flatly forbade NNWSs from "tak[ing] any... action which would cause an increase in the total number of States and other Organizations having independent power to use nuclear weapons."⁵⁸ Further, NNWSs were required not to "grant... assistance [in the manufacture of nuclear weapons]."⁵⁹ Following the submission of this 1965 draft to the ENDC, the U.S. Delegation briefly

⁵⁶ For example, although attended by much controversy, no serious challenges were made to the North Korean withdrawal in 2003. *See* Non-Proliferation Treaty, *supra* note 1, art. X, para. 1 ("Each Party shall . . . have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests."); *see also* George Bunn & John B. Rhinelander, *NPT Withdrawal: Time for the Security Council to Step In*, ARMS CONTROL TODAY, May 2005, at 17 (arguing the Security Council should increase its role in NPT withdrawal).

⁵⁷ Non-Proliferation Treaty, *supra* note 1, arts. I–II.

⁵⁸ United States Proposal Submitted to the Eighteen Nation Disarmament Committee: Draft Treaty to Prevent the Spread of Nuclear Weapons, art. II, para. 1, U.N. DCOR, Supp. Jan.– Dec. 1965, U.N. Doc. DC/227 (Aug. 17, 1965), *reprinted in* U.S. ARMS CONTROL & DISARMAMENT AGENCY, *supra* note 41, at 347.

⁵⁹ *Id.* para. 2.

explained the reasoning behind each article. In regard to its draft of Article II and the obligations it placed on NNWS, the U.S. Delegation highlighted the importance of the obligation placed on NNWSs not to increase the number of nuclear entities in the world:

This simple draft would thus prevent any increase in the number of nuclear Powers. You will all remember President Kennedy's fear that there would be no rest for anyone, no stability, no real security and no chance for disarmament in a world with a growing number of nuclear Powers. This draft would ensure that there would be no increase in the number, even by one.⁶⁰

This statement seems to suggest that, at that time, the United States recognized the importance of drafting Article II in such a manner which would not only prevent the acquisition of nuclear weapons by an NNWS, but also in a way that would prevent NNWSs from taking any actions which might lead to the proliferation of nuclear weapons. Further, the United States was not the only state to recognize the need to draft the Treaty in a manner that would directly tackle the possibility of NNWS proliferation. The United Kingdom Delegation recognized and commended the U.S. draft, as it was solely "concerned with non-dissemination" of nuclear weapons.⁶¹ However, the UK went on to discuss a theoretical loophole present in the draft of Article II that would potentially allow a confederation of states to gain control of nuclear weapons, and stressed its desire to close the loophole and "to see dissemination interpreted in the strictest possible way."⁶²

The Soviet Union also joined the discussion and asserted, "Only such a solution to the question of the non-dissemination of nuclear weapons—one that does not allow any loopholes or exceptions—is of any value for the cause of peace."⁶³ It seems that as early as 1965, the need to draft Article II in a manner dispositive of this issue was at the forefront of negotiations.

⁶⁰ William C. Foster, Dir., Arms Control & Disarmament Agency, Statement to the Eighteen Nation Disarmament Committee: Draft Treaty to Prevent the Spread of Nuclear Weapons (Aug. 17, 1965), *reprinted in* U.S. ARMS CONTROL & DISARMAMENT AGENCY, *supra* note 41, at 349, 351.

⁶¹ Lord Chalfont, British Disarmament Minister, Statement to the Eighteen Nation Disarmament Committee: Nondissemination of Nuclear Weapons (Aug. 19, 1965), *reprinted in U.S.* ARMS CONTROL & DISARMAMENT AGENCY, *supra* note 41, at 355, 359.

⁶² *Id.* at 360.

⁶³ Semen K. Tsarapkin, Soviet Conference Representative, Statement to the Eighteen Nation Disarmament Committee: Nondissemination of Nuclear Weapons (Aug. 31, 1965), *reprinted in* U.S. ARMS CONTROL & DISARMAMENT AGENCY, *supra* note 41, at 362, 363.

Approximately one month later on September 24, 1965, the Soviet Union issued a counter-proposal that would have also avoided the loophole, albeit through somewhat different wording, by requiring NNWSs "not to create, manufacture or prepare for the manufacture of nuclear weapons either independently or together with other States, in their own territory or in the territory of other States."⁶⁴ However, the precise language and meaning of the Soviet draft treaty of September 1965 was overlooked by the ENDC members because the delegation from the United States highlighted the Soviets' preoccupation with NATO and simply viewed the Soviet counter-proposal as a signal that the Soviet Union was prepared to begin negotiations on the terms of the Treaty.⁶⁵

In March of 1966, the United States amended its draft to create three distinct obligations under Article II that, at least in some instances, address NNWSs as supply-side proliferators:

- 1. Not to manufacture nuclear weapons
- 2. Not to ... provide, whether alone or in any association of non-nuclear-weapon States: (a) assistance in the manufacture of nuclear weapons, in preparations for such manufacture, or in the testing of nuclear weapons
- 3. Not to take any other action which would cause an increase in the total number of States and associations of States having control of nuclear weapons.⁶⁶

Over a year later, though, when the draft text that included the verbiage of the future Article II was released, provisions envisioning NNWSs as supply-

⁶⁴ Soviet Draft Treaty on the Nonproliferation of Nuclear Weapons, art. II, para. 1, U.N. GAOR, 20th Sess., Supp. 106 (Vol. III), U.N. Doc. A/5976 (Sept. 24, 1965), *reprinted in* U.S. ARMS CONTROL & DISARMAMENT AGENCY, *supra* note 41, at 443.

⁶⁵ See William C. Foster, Dir., Arms Control & Disarmament Agency, Statement to the First Committee of the General Assembly: Nonproliferation of Nuclear Weapons (Oct. 18, 1965), *reprinted in* U.S. ARMS CONTROL & DISARMAMENT AGENCY, *supra* note 41, at 474, 478 ("[T]he Soviet draft continues to focus narrowly on Soviet preoccupation with NATO Yet we are encouraged by the fact that perhaps the Soviet Union is now prepared to negotiate.").

⁶⁶ U.S. Proposal Submitted to the Eighteen Nation Disarmament committee: Amendments to the U.S. Draft Treaty to Prevent the Spread of Nuclear Weapons, U.N. DCOR, Supp. 1966, U.N. Doc. DC/228, Annex 1, art. II (ENDC/152/Add.1, Mar. 21, 1966), *reprinted in* U.S. ARMS CONTROL & DISARMAMENT AGENCY, DOCUMENTS ON DISARMAMENT 1966, at 159, 159–60 (1967).

side actors were missing.⁶⁷ Even more baffling, this loophole was highlighted by Egypt⁶⁸ during negotiations and nothing was done to address it.⁶⁹ The Egyptian Delegation made its concerns quite clear:

Indeed, it makes no mention of the obligation of the nonnuclear-weapon States parties to the treaty to refrain in their turn from assisting, encouraging or inducing in any way another non-nuclear-weapon State, whether a party to the treaty, or not, to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices. It is quite obvious that therein lies a possibility of the proliferation of nuclear weapons which must and can easily be eliminated by including this prohibition in the text of article II of the draft before us.⁷⁰

Despite Egypt's obvious concern regarding Article II and the possibility of NNWSs acting as suppliers and proliferators of nuclear technology, the loophole was never closed.

IV. WHY WASN'T THE ARTICLE II PROBLEM ADDRESSED?

Scholars and practitioners in the nonproliferation field offer three explanations for the Article II loophole: (A) fear of re-opening negotiations;⁷¹ (B) belief that NNWSs were not a realistic supply-side threat;⁷² and (C) failure to perceive a loophole.⁷³

⁶⁷ Draft Treaty on the Nonproliferation of Nuclear Weapons, U.N. DCOR, Supp. 1967, U.N. Doc. DC/230, Annex IV, art. II (ENDC/192/Add.1, Aug. 24, 1967), *reprinted in* U.S. ARMS CONTROL & DISARMAMENT AGENCY, DOCUMENTS ON DISARMAMENT 1967, at 338, 339 (1968); Draft Treaty on the Nonproliferation of Nuclear Weapons, U.N. DCOR, Supp. 1967, U.N. Doc. DC/230, Annex IV, sec. 8 (ENDC/193, Aug. 24, 1967), *reprinted in* U.S. ARMS CONTROL & DISARMAMENT AGENCY, *supra*, at 338, 339. These identical documents were submitted by the U.S. and Soviet delegations respectively. U.S. ARMS CONTROL & DISARMAMENT AGENCY, *supra*, at 338 n.1.

⁶⁸ At the time of the ENDC, Egypt was referred to as the United Arab Republic (U.A.R.).

⁶⁹ Brian Donnelly, Head, Non-Proliferation Dep't of the Foreign and Common Wealth Office, British Diplomat Serv., Statement on the Nuclear Weapons Non-Proliferation Articles I, II, and VI of the Treaty on the Non-Proliferation of Nuclear Weapons, (Jan. 1995) (transcript available at http://www.opanal.org/Articles/cancun/can-Donnelly.htm).

⁷⁰ Hussein Khallaf, United Arab Republic Conference Representative, Statement to the Eighteen Nation Disarmament Committee: Nonproliferation of Nuclear Weapons (Sept. 26, 1967), *reprinted in* U.S. ARMS CONTROL & DISARMAMENT AGENCY, *supra* note 67, at 421, para. 8.

⁷¹ Donnelly, *supra* note 69.

⁷² Williamson, *supra* note 45, at 131.

⁷³ *Id*.

A. Fear of Reopening Negotiated Provisions

During negotiations of Article II, the United States and Soviet Union clashed over the Multilateral Force Project (MFP).⁷⁴ Under the MFP, the United States proposed to create a fleet of nuclear-armed submarines and warships manned by NATO crews.⁷⁵ Accordingly, the initial U.S. draft of the NPT prohibited "the transfer of weapons to the 'national' control of [NNWSs]," but left open the possibility "for the supply of weapons to a group of countries."⁷⁶ This language was unacceptable to the Soviet Union, fearing that the project would equip West Germany with nuclear weapons.⁷⁷ Therefore, the Soviet draft text prohibited NNWSs from taking part in the " 'control use nuclear weapons," transmitting or of " 'information ... which [could] be employed for the ... use of nuclear weapons," and having "access" to nuclear weapons, noticeably omitting the word "national."⁷⁸ These competing proposals left American-Soviet discussions deadlocked for over a year.⁷⁹

An agreement resolving the MFP issue was reached following contentious negotiations conducted secretly between U.S. Secretary of State Dean Rusk and Soviet Foreign Minister Andrei Gromyko.⁸⁰ The United States agreed not to transfer direct control of nuclear weapons to its allies, with the understanding that the Soviet Union would not object to a U.S. interpretation of Articles I and II that allowed indirect nuclear weapons sharing through NATO.⁸¹ Under the U.S. interpretation, the United States would maintain peacetime control of nuclear weapons located on allied territory, but could transfer control directly to its allies in the event of war, at which point NPT obligations would cease to be binding.⁸² With this mutual

⁷⁴ B. Goldschmidt, *The Negotiation of the Non-Proliferation Treaty (NPT)*, 22 INT'L ATOMIC ENERGY AGENCY BULL, no. 3, 1980 at 73, 74–75.

⁷⁵ See generally James B. Solomon, The Multilateral Force: America's Nuclear Solution for NATO (1960–1965), at 1 (May 4, 1999) (unpublished Trident Scholar project report, United States Naval Academy) (available at http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&d oc=GetTRDoc.pdf&AD=ADA375751) (outlining the American attempt "to create a NATO multilateral nuclear fleet").

⁷⁶ Goldschmidt, *supra* note 74, at 75.

⁷⁷ Dimitris Bourantonis, *The Negotiation of the Non-Proliferation Treaty 1965–1968: A Note*, 19 INT'L HIST. REV. 347, 349 (1997).

⁷⁸ GLENN T. SEABORG & BENJAMIN S. LOEB, STEMMING THE TIDE: ARMS CONTROL IN THE JOHNSON YEARS 192 (1987) (quoting Soviet Draft Treaty on the Nonproliferation of Nuclear Weapons, *supra* note 64).

⁷⁹ Goldschmidt, *supra* note 74, at 74–75.

⁸⁰ *Id.* at 75.

⁸¹ George Bunn, *The Nuclear Nonproliferation Treaty: History and Current Problems*, ARMS CONTROL TODAY, Dec. 2003, at 4.

⁸² See Hearings on the Treaty on the Nonproliferation of Nuclear Weapons Before the S.

understanding of Articles I and II in place, the United States and the Soviet Union were prepared to present a united front to the remaining negotiators.⁸³

Thus, one theory is that the United States and the Soviet Union rejected Egypt's proposal to address the Article II ambiguity for fear that opening Articles I and II to negotiations would result in a breakdown of their hardwon deal.⁸⁴ The United States was already concerned about the reaction of NATO allies to the deal struck with the Soviet Union.⁸⁵ By opening Article II to revision, there was the possibility that the states excluded from the American-Soviet understanding would wish to renegotiate other elements of the existing provisions. This fear was verbalized by W.C. Foster, United States Representative and Co-Chairman of the ENDC, during a conference of the ENDC. Foster stated:

[T]he resolution has been subject to interpretations about which some controversy unfortunately has arisen. At this stage in our work, I am convinced that we should not risk transferring this controversy about interpretation to the treaty itself by making the changes which the representatives of the United Arab Republic and Romania proposed.⁸⁶

At the eleventh hour, then, both the United States and the Soviet Union also feared the other side would lose resolve. Therefore, it appears that the Cold War superpowers opted to turn a blind eye to the Article II ambiguity in an effort to prevent their deal from being renegotiated by the other states.

Comm. on Foreign Relations, 90th Cong., 2d Sess., 21, 27–28 (1968) (statement of Dean Rusk, U.S. Sec'y of State).

³ Goldschmidt, *supra* note 74, at 75.

⁸⁴ Donnelly, *supra* note 69.

⁸⁵ See, e.g., Aldo Moro, Pres., Italian Council of Ministers, Speech Before the Chamber of Deputies (July 13, 1967), as reprinted in NUCLEAR NON-PROLIFERATION IN A WORLD OF NUCLEAR POWERS 99, 99–100 (Stephen D. Kertesz ed., 1967) ("Presently all we know is that the United States and the Soviet Union, although they have reached an agreement of principle on various aspects of the questions, continue to examine other aspects of lesser importance about which an agreement has not yet been reached. Until today, then, a treaty complete in its various parts does not exist. Such a treaty will have to be brought before other governments and the Eighteen Nation Disarmament Committee. Only at that point will it be possible [for Italy] to evaluate the opportunity of carrying out the initiative suggested ").

⁸⁶ William C. Foster, Dir., Arms Control & Disarmament Agency, Statement to the Eighteen Nation Disarmament Committee: Nonproliferation of Nuclear Weapons (Feb. 27, 1968), *reprinted in* U.S. ARMS CONTROL & DISARMAMENT AGENCY, DOCUMENTS ON DISARMAMENT 1968, at 125, para. 88 (1969).

B. Belief That NNWSs Were Not Supply Threats

Shortsightedness on the part of the United States and the Soviet Union to the threat of NNWSs as suppliers of nuclear weapons technology is another explanation offered for the Article II ambiguity.⁸⁷ Some scholars suggest that, during the treaty drafting process, NWSs saw themselves as having a monopoly on nuclear materials and information.⁸⁸ This short-term understanding led those states to write Articles I and II in terms of supply and demand.⁸⁹ Unsurprisingly, history shows that a monopoly on new military technologies is merely transitory; whether it be the longbow, the machine gun, or nuclear weapons, new technologies and military secrets do not remain in the exclusive possession of only one state for long.⁹⁰ As such, it is possible that NNWSs will acquire nuclear weapons technology pre- and post-accession to the NPT.

While not envisaged at the time of negotiation, states may accede to the NPT already possessing the technological means to build nuclear weapons. For example, South Africa secretly developed and then dismantled a successful nuclear weapons program prior to acceding to the NPT in July 1991.⁹¹ The mere fact that the program was renounced, however, does not eradicate the knowledge base and concomitant proliferation threat it possesses. Not only could a state like South Africa use its expertise to resurrect its own nuclear weapons program, it could potentially assist other states in doing so.⁹² Should it decide to offer such assistance while a party to the NPT, it would arguably not violate its NPT Article II obligations. This is certainly not to suggest that South Africa would ever proliferate, given its excellent track record in nonproliferation and leadership in the NPT, but it is certainly possible.

States may also acquire the knowledge that forms the basis for a nuclear weapons program while party to the NPT. This is also unremarkable, since some of this knowledge is now available on the Internet although critical

⁸⁷ James D. Fry, *Dionysian Disarmament: Security Council WMD Coercive Disarmament Measures and Their Legal Implications*, 29 MICH. J. INT'L L. 197, 285–86 (2008).

⁸⁸ *Id.* at 286.

⁸⁹ *Id.* at 285.

⁹⁰ See CIRINCIONE, supra note 5, at 15 (noting that, as early as 1945, the Manhattan Project's "scientists warned that the United States could not rely on its current advantage in atomic weaponry" and that "[n]uclear research would not be an American monopoly for long, and secrecy would not mean protection"); see also Joyner & Parkhouse, supra note 48, at 214 (noting that "[t]he existence of large quantities of nuclear weapons and fissile material spread across the world").

⁹¹ ALBRIGHT, *supra* note 29, at 1–2.

 $^{^{92}}$ David Albright, Inst. for Sci. & Int'l Security, The Nuclear Weapons Legacy and the ANC 17 (1994).

enrichment and reprocessing technologies are not publically available and remain extremely difficult to master.⁹³ Integral to the NPT's bargain is the right of NNWSs party to the NPT to pursue nuclear energy.⁹⁴ However, states pursuing nuclear energy have a basis for arguing that they need to develop the full nuclear fuel cycle, which is clearly integral to nuclear weapons production.⁹⁵ A state that masters centrifuge enrichment technology for peaceful purposes while a party to the NPT (under IAEA full scope safeguards) would gain the knowledge necessary to produce highly enriched uranium,⁹⁶ that is, uranium enriched to over 20% in the isotope uranium-235, although true-weapons grade is enriched to over 90%.⁹⁷ It is the process of enriching uranium to weapons-grade levels that poses the real technological obstacle to a nuclear weapons program.⁹⁸ The actual creation of the explosive device utilized in highly enriched uranium weapons can be relatively easy.⁹⁹ Thus, an NNWS with fuel cycle enrichment capacity could assist another state or non-state actor with a critical component of a nuclear weapons program. Since this assistance is arguably not in violation of NPT Article II, NNWSs have less of an incentive to ensure that their assistance will not be exploited for non-peaceful purposes.

⁹³ Günther Handl, *The Nuclear Non-Proliferation Regime: Legitimacy as a Function of Process*, 19 TUL, J. INT'L & COMP. L. 1, 2 & n.2 (2010) (noting that "at least forty-nine states [are] presumed to have the scientific knowledge and technological capability to build nuclear weapons," and that such "sensitive nuclear know-how and expertise [is] shared globally and readily accessible" as "a result of the explosive growth of Internet-based information exchanges," and indeed that, "[s]ometimes governments themselves inadvertently disclose sensitive nuclear weapons information").

⁹⁴ Non-Proliferation Treaty, *supra* note 1, art. IV, para. 1.

⁹⁵ See Spector, supra note 4, at 624 (explaining that "there are legitimate reasons for countries to have enrichment or reprocessing capabilities, since both can be used to produce fuel for nuclear power reactors").

⁹⁶ PIERRE GOLDSCHMIDT, THE PROLIFERATION CHALLENGE OF THE NUCLEAR FUEL CYCLE IN NON-NUCLEAR WEAPON STATES (2004), *available at* http://www.iaea.org/newscenter/statem ents/ddgs/2004/goldschmidt26042004.html.

⁹⁷ CIRINCIONE, *supra* note 5, at 162; *see also* 1 RICHARD G. HEWLETT & OSCAR E. ANDERSON, JR., A HISTORY OF THE UNITED STATES ATOMIC ENERGY COMMISSION: THE NEW WORLD, 1939/1946, at 245 (1962) (explaining, "for to depend on implosion meant proceeding in an area where there was no experience and where many unforeseen and perhaps insoluble difficulties were sure to arise. The gun method was a much better risk."); *see id.* at 234–35 (providing an expanded discussion of the gun method, which is the only route to a nuclear weapon using highly enriched uranium).

⁹⁸ CIRINCIONE, *supra* note 5, at 6–7.

⁹⁹ See id. at 9 (describing the use of large gas centrifuges as a common and economical method of enriching uranium); see also DEP'T OF DEFENSE, MILITARILY CRITICAL TECHNOLOGIES LIST PART II: WEAPONS OF MASS DESTRUCTION TECHNOLOGIES, at II-5-61 (1998), available at http://www.fas.org/irp/threat/mct198-2/p2sec05.pdf ("[Ninety] percent of the overall difficulty in making a nuclear weapon lies in the production of special nuclear material (if no outside source is readily available)....").

C. Failure to Perceive a Problem

An additional possible explanation for the Article II ambiguity is that the NPT drafters did not believe that the ambiguity existed. This argument stems from the rejection of Egypt's proposal to amend Article II.¹⁰⁰ At that time, the Co-Chairman Foster stated that the only plausible grounds for an NNWS to assist another state in acquiring a nuclear weapon would be eventual acquisition of the nuclear weapon for the assisting NNWS itself.¹⁰¹ The acquisition of nuclear weapons is in contravention of NPT Article II obligations and therefore it was argued that there was no need to reopen the provision.¹⁰² However, NNWSs may have other motives for providing nuclear weapons assistance besides attaining their own nuclear weapons capability.

First, states could provide assistance to other states or even non-state actors out of security concerns. An NNWS might believe that its defense interests are not adequately protected through existing security arrangements.¹⁰³ Consequently, it "might agree to provide quiet assistance to another state's nuclear program because of the perceived security benefits" of such cooperation.¹⁰⁴ Even though this instance predated the NPT, such may have been the case in French assistance to the Israeli nuclear program in the 1950s.¹⁰⁵ Additionally, instability in the French colonies of North Africa made Israeli intelligence support invaluable to France.¹⁰⁶ The breakthrough in nuclear assistance came during and after the Suez Canal Crisis, when France resolved to provide Israel with a research reactor in exchange for Israel's collaboration in the operation.¹⁰⁷

It is plausible that NNWSs might be induced to offer similar strategic support to nuclear weapons programs given the right circumstances. Such

¹⁰⁰ Foster, *supra* note 86, para. 83.

¹⁰¹ *Id*.

¹⁰² Alexis Roschin, Soviet Conference Representative, Statement to the Eighteen Nation Disarmament Committee (Feb. 27, 1968), reprinted in U.S. ARMS CONTROL & DISARMAMENT AGENCY, supra note 86, at 118, para. 59.

¹⁰³ Jacqueline R. Smith, Strengthening the Nuclear Non-Proliferation Treaty Toward the 1995 Extension Conference, in 87 AM. SOC'Y INT'L L. PROC. 82, 99 (Patricia A. Comella reporter, 1993). ¹⁰⁴ *Id*.

¹⁰⁵ Warner D. Farr, The Third Temple's Holy of Holies: Israel's Nuclear Weapons, in THE COUNTERPROLIFERATION PAPERS 5 (Future Warfare Series No. 2, 1999), available at http:// www.au.af.mil/au/awc/awcgate/cpc-pubs/farr.htm.

¹⁰⁶ Id. at 3 ("France was Israel's principal arms supplier, and as instability spread through French colonies in North Africa, Israel provided valuable intelligence obtained from contacts with sephardic Jews in those countries.").

¹⁰⁷ *Id.* at 4.

support, if provided without the intent to acquire nuclear weapons, would not fit within the explanation offered by the Soviet Representative.¹⁰⁸ However, if assistance were provided to a state that was also a party to the Treaty then the receiving state would be in violation of NPT Article II.¹⁰⁹

Second, economic interests could drive proliferation.¹¹⁰ As one nuclear expert pointed out, "[m]ost people are horrified of nuclear weapons. They understand the danger of them. But if they're being asked to buy or sell some vital piece of equipment that costs millions of dollars, then some of the concern is diminished, and they're kind of willing to turn a blind eye."¹¹¹ An NNWS might indeed look the other way and choose to exploit the Article II ambiguity despite concerns that it harbors about the nuclear intentions of the importing state.¹¹² As a strictly legal matter of NPT interpretation, there is little to suggest that it would be the exporting NNWS's concern whether it was the intention of the importing state to proliferate and even whether such proliferation was consistent with the importing state's obligations, should it have them, under Article II of the NPT.¹¹³ Should perceived economic benefits outweigh the proliferation concerns of an NNWS, the Article II ambiguity could provide a convenient legal pathway for trade in nuclear weapons technology, but the Article III issue would still need to be overcome.114

Additionally, the delegations from the United States and the Soviet Union (the co-drafters of the Treaty) contended that assistance by an NNWS to another NNWS developing nuclear weapons technology would in fact constitute a violation of the NPT under the preamble, Articles II, and III; and therefore, an amendment to Article II was unnecessary.¹¹⁵ Specifically, the American delegation to the ENDC responded to Egypt's concerns by stating:

[S]ince we wholly share the desire of the representative of the United Arab Republic to make this treaty as effective as possible, I want to assure him again that we believe it does deal in a realistic way with the practical and significant problems to which he alluded. However, while ensuring that the treaty does

¹⁰⁸ Roschin, *supra* note 102, paras. 52–60.

¹⁰⁹ Smith, *supra* note 103, at 99.

¹¹⁰ Id.

¹¹¹ Profit and 'Peril' in the Secret Nuclear Trade, NPR (Mar. 18, 2010), http://www.npr.org/2 010/03/18/124780799/profit-and-peril-in-the-secret-nuclear-trade (summarizing an interview with nuclear weapons expert David Albright).

¹¹² Smith, *supra* note 103, at 99.

¹¹³ *Id*.

¹¹⁴ *Id.*

¹¹⁵ Roschin, *supra* note 102, paras. 59-62.

deal effectively with such problems, we must avoid encumbering the treaty with provisions designed to deal with largely hypothetical possibilities. Such provisions could pose unnecessary constitutional problems of implementation for some States. Here, as with other aspects of this treaty, we must strike a balance between what is essential and what might in ideal circumstances be desirable—between attempts to deal with remote or unlikely contingencies and what all of us consider to be proper and necessary obligations of the parties.¹¹⁶

This statement reaffirms the view that the United States attempted to minimize the significance of the ambiguity in the Treaty by arguing that the possibility of an NNWS transferring nuclear weapons technology, and thus behaving as a supply-side operator, was extremely remote and merely hypothetical, which it undoubtedly was when the Treaty was drafted in the late 1960s. Perhaps this offers the best explanation for why the final text of Article II ultimately turned out that way.

The Soviet Delegation seems to have more carefully considered Egypt's concerns, and offered a thorough and direct response to Egypt's proposed amendment. The Soviets held that their interpretation of the preamble combined with Article II, or Article III alone, closed any theoretical loophole that might have existed in the Treaty.¹¹⁷ However, the Soviet Delegation did not precisely explain how the preamble—which is not legally binding—in combination with Article II, would close the theoretical loophole. Rather, the Soviets seemed to rely on a common understanding between parties that proliferation of any kind would be contrary to the spirit of the resolution and that states would not knowingly violate it. The Egyptian Delegation directly opposed this type of interpretation, particularly in a treaty of this importance:

To do away with this loophole it is not enough to refer to the good faith that should prevail in the interpretation of treaties; because, however right it may be, this principle of good faith has never obviated the need for a precise written agreement,

¹¹⁶ Foster, *supra* note 86, para. 90.

¹¹⁷ Roschin, *supra* note 102, para. 59 ("[I]n substance this amendment is covered by the meaning of article II and the preamble to the treaty. If a non-nuclear-weapon State party to the treaty were to assist another non-nuclear-weapon State to manufacture or acquire nuclear weapons, such a case—I repeat, according to the meaning of article II and the preamble to the treaty—would be regarded as a violation of the treaty.").

particularly in a matter such as the one we are now dealing with.¹¹⁸

However, Egypt's concerns went unheeded as the Treaty drafters still failed to acknowledge a loophole, while none of the other ENDC member states supported Egypt's views, perhaps because it would be vet another restriction on them, although admittedly, this is highly speculative.

The Soviet Union elaborated more fully on its interpretation of Article III, and specifically why it was viewed as closing any potential loophole in Article II. It maintained that the purpose of Article III was to establish clearly "that no State party to the treaty has the right to transfer to any nonnuclear State fissionable materials or the appropriate equipment for the processing of such materials in circumvention of the safeguards laid down in the treaty, no matter in whose ownership."¹¹⁹ Ultimately, the Soviet Union contended that the preamble and Articles II and III not only addressed and fully closed the loophole highlighted by Egypt, but also met the General Assembly's requirement "that '[t]he treaty should be void of any loopholes' " as set out in GA Resolution 2028 (XX).¹²⁰

However, Article III simply requires that states party to the Treaty agree not to transfer nuclear materials or equipment especially designed or prepared for the production of nuclear materials to any NNWS, unless the supplied material would be placed under the IAEA safeguards system.¹²¹ This fails to address the more likely possibility that an NNWS might provide aid under the guise of ignorance of the intentions of the state to which it is providing the assistance.¹²² Most transfers are in fact between non-state actors, which most often are corporations.¹²³ No NPT party could evade Article III by claiming that the transfer was to a non-state actor.¹²⁴

¹¹⁸ Hussein Khallaf, United Arab Republic Conference Representative, Statement to the Eighteen Nation Disarmament Committee: Nonproliferation of Nuclear Weapons (Feb. 20, 1968), reprinted in U.S. ARMS CONTROL & DISARMAMENT AGENCY, supra note 86, at 78, para. ^{11.} Roschin, *supra* note 102, para. 61.

¹²⁰ *Id.* para. 42 (quoting G.A. Res. 2028 (XX), *supra* note 41, para. 2(a)).

¹²¹ See Williamson, supra note 45, at 131 n.232 (noting that the presence of nuclear technology in NNWSs necessitated the restriction of nuclear technology transfers to NNWSs except under IAEA safeguards).

¹²² See id. 132-33 (arguing that several NNWS parties to the NPT would, despite their lack of nuclear weapons design experience, be capable of assisting other, less advanced NNWSs in developing their nuclear technologies).

¹²³ See James A. Glasgow, U.S. Department of Energy and Nuclear Regulatory Commission Regulations Regarding Export of Nuclear Material, Components and Technical Data, in PRACTISING L. INST., COPING WITH U.S. EXPORT CONTROLS 2009, at 325 (2009) (discussing U.S. regulation of companies and corporations engaged in the commercial trade of nuclear

D. Lessons from the Origin of Article II

To the above three theories, which are based upon reluctance to address the issue or simple negligence and lack of imagination, it must be added as a theoretical possibility, even if highly implausible, that it was intentional. While there is no supporting evidence for such an assertion, when reviewing possible explanations, this must be included as one alternative. Also, when one considers the number of legal and policy officials in multiple states and international organizations that would have had to review the draft treaty prior to its entry-into-force, it is conceivable that someone drafted it that way deliberately and then intentionally permitted it to remain, but again, this is highly speculative.

The actual reason, if one exists, that Article II was never clarified may lie somewhere in the gray area among all explanations considered. It is plausible that the United States and Soviet Union, distracted by NATO nuclear sharing issues, overlooked NNWSs as potential supply-side proliferators. Once this mistake was recognized, they may have opted to avoid reopening discussions in light of the perceived inability of NNWSs to supply nuclear weapons technology and the belief that the only reason to supply such technology would be eventual self-arming. But certainty about the origins of the text of Article II is relatively unimportant. In the end, although explanations may account for its drafting, they do not definitively close the potential loophole.

V. CASE STUDY-GERMAN NUCLEAR PROGRAM SONDERWEG

Germany's Sonderweg program is an excellent example of Article II ambiguity in action. In the 1970s, the Federal Republic of Germany, an NNWS party to the NPT, insisted that it was allowed to develop the entire nuclear fuel cycle in exercising its right to develop nuclear technology for peaceful purposes.¹²⁵ Germany maintained that as long as its motives were peaceful, it was not in violation of the NPT.¹²⁶ Though this assertion was

technology).

¹²⁴ See Fry, supra note 87, at 279 (noting that although Article III of the NPT "lack[s] any reference to non-State actors," the NPT nonetheless requires safeguards to be " 'applied on all source or special fissionable material in all peaceful nuclear activities within the territory of such State, under its jurisdiction, or carried out under its control anywhere'" (citing Non-Proliferation Treaty, *supra* note 1, art. III, para. 1)).

¹²⁵ Andrew Grotto, Why Do States That Oppose Nuclear Proliferation Resist New Nonproliferation Obligations?: Three Logics of Nonproliferation Decision-Making, 18 CARDOZO J. INT'L & COMP. L. 1, 10 (2010).

¹²⁶ See Ian Johnstone, Treaty Interpretation: The Authority of Interpretive Communities, 12

met with vehement disapproval from the United States, Germany went ahead with Sonderweg, its nuclear development program.¹²⁷ After the successful development of the nuclear fuel enrichment process, the German company Siemens KWU entered into negotiations with Brazil for the sale and transfer of this technology.¹²⁸

At the time, Brazil was not a party to the NPT and was therefore exempt from the legal requirements of Article II to refrain from the acquisition and manufacture of nuclear weapons.¹²⁹ Further, the United States suspected that Brazil's nuclear program was not solely for the development of nuclear technology for peaceful purposes.¹³⁰ Regardless, Germany maintained its right to sell its enrichment technology to Brazil on the grounds that Brazil had signed other bilateral safeguard agreements with the IAEA.¹³¹ Ultimately, the sale was not consummated and the fuel cycle technology was never transferred to Brazil.¹³² However, U.S. concerns that the Brazilian military government might establish a secret nuclear program, which could benefit from utilizing German technology, turned out to be correct.¹³³ While Brazil had actually established a nuclear program, it was terminated in 1990 due to lack of funding.¹³⁴ If the Brazilian nuclear program had not been cancelled and the sale of nuclear technology to Brazil had been consummated, Germany might have borne a major responsibility for nuclear

¹²⁹ Krause, *supra* note 128, at 3; *see also Brazil Prepares to Enrich Uranium for Reactors*, ARMS CONTROL TODAY, Nov. 2003 (noting that Brazil did not accede to the NPT until 1997).

¹³⁴ *Id.*

MICH. J. INT'L L. 371, 411–12 (1991) (noting that the Germans disagreed with the U.S. position and that the Treaty required no state to be disregarded or excluded from nuclear development).

¹²⁷ The West German deal included two power reactors and plans for six more, as well as plants for uranium processing, conversion, enrichment, and reprocessing. Sharon Squassoni & David Fite, *Brazil as Litmus Test: Resende and Restrictions on Uranium Enrichment*, ARMS CONTROL TODAY, Oct. 2005.

¹²⁸ Joachim Krause, German Nuclear Export Policy and the Proliferation of Nuclear Weapons – Another Sonderweg? 3 (paper presented at the Aspen Institute Conference, Germany and Nuclear Nonproliferation, Berlin, Feb, 26, 2005), *available at* http://www.npoli cy.org/article_file/German_Nuclear_Export_Policy_and_the_Proliferation_of_Nuclear_Weap ons-Another_Sonderweg.pdf; *see also* William W. Lowrance, *Nuclear Futures for Sale: To Brazil from West Germany, 1975*, INT'L SECURITY, Autumn 1976, at 147 (describing the culmination and fallout of the negotiations).

¹³⁰ See CENT. INTELLIGENCE AGENCY, SPECIAL NATIONAL INTELLIGENCE ESTIMATE: PROSPECTS FOR FURTHER PROLIFERATION OF NUCLEAR WEAPONS 38 (1974), *available at* http://www.gwu. edu/~nsarchiv/NSAEBB/NSAEBB240/snie.pdf (comprising a recently declassified Special National Intelligence Estimate conducted in 1974 by the U.S. intelligence community describing Brazil as a possible candidate for developing nuclear weapons).

¹³¹ Krause, *supra* note 128, at 3.

¹³² Sharon Squassoni & David Fite, *Brazil's Nuclear History*, ARMS CONTROL TODAY, Oct. 2005.

¹³³ Krause, *supra* note 128, at 5.

proliferation in Brazil and the potential creation of an additional de facto NWS.¹³⁵ This illustrates the importance of IAEA safeguards to prevent the diversion of nuclear material to non-peaceful uses. If it was under full scope safeguards, which are the most comprehensive the IAEA offers, and the technology was provided under safeguards, then Germany's responsibility for any potential Brazilian weapons development would be greatly diminished.

In this example, Germany, a party to the NPT, was dangerously close to exporting nuclear enrichment technology to Brazil, at the time not a party to the NPT, which could have ultimately led to the development of a Brazilian nuclear weapon. So long as the technology was provided under safeguards, if Brazil had later diverted the German technology for use in a clandestine weapons program, it would not constitute a German violation of the NPT. This demonstrates that the views of the United States and Soviet Union during the negotiations of the NPT, that NNWSs acting as suppliers of nuclear technology was nothing more than "a remote or unlikely"¹³⁶ hypothetical, did not adequately consider future scenarios.

VI. ADDRESSING ARTICLE II NOW

The real enigma is not whether the perception of a gap in the coverage of Article II is accurate, but rather how, or whether, to attempt to close it. Currently, Article II binds NNWSs to the mirror image of Article I's obligations for NWSs. Ideally, however, NNWSs should also be under clear obligations akin to those found in Article I with respect to assistance. With the NPT regime in place for over four decades,¹³⁷ the question becomes whether the difficulty in introducing modifications to responsibilities makes closing the potential loophole impossible.

A. Amending the NPT to Clarify Article II Is Probably Not Feasible Either Politically or Procedurally

Politically, the NPT represents a delicate compromise that has withstood the test of time. Any possible amendment to Article II would open the entire

¹³⁵ *Id.* As a legal matter, under the NPT it is not possible for a state acquiring nuclear weapons after 1967 to be an NPT NWS, which is why the de facto qualifier is used. Non-Proliferation Treaty, *supra* note 1, art. II.

¹³⁶ See supra text accompanying note 116.

¹³⁷ See Non-Proliferation Treaty, supra note 1; see also Treaty on the Non-Proliferation of Nuclear Weapons (NPT), UNITED NATIONS OFF. FOR DISARMAMENT AFF., http://www.un.org/disarmament/WMD/Nuclear/NPT.shtml (last visited Dec. 8, 2011) ("[T]he [NPT] entered into force in 1970. On 11 May 1995, the Treaty was extended indefinitely.").

Treaty to revision.¹³⁸ This concern has become particularly acute in recent years as NNWSs have been increasingly disillusioned with the American and Russian nuclear disarmament efforts.¹³⁹ As a condition of the indefinite extension of the NPT in 1995, many NNWSs believed that the NWSs would disarm more quickly.¹⁴⁰ The NNWSs now question whether this has happened and perceive U.S. and Russian disarmament efforts as insufficient.¹⁴¹ This argument is also a basis for the claim that those states are not meeting their Article VI obligations.¹⁴² The fear is that, should the NPT be opened to amendment, NNWSs will insist on nuclear disarmament in a time-bound framework that would be unacceptable to the United States and Russia, and most likely to the other NWSs as well.¹⁴³ Additionally, an amendment to the NPT could be seen as an admission that the framers of the NPT erred in the drafting of Article II by failing to incorporate Egypt's proposals and to perceive the actual role NNWSs play in the NPT regime.

Procedurally, the amendment process specified in Article VIII is so cumbersome that it makes change highly unlikely.¹⁴⁴ First, one-third of the NPT's member states must request a conference on any one proposal for true amendment discussion to begin.¹⁴⁵ That hurdle, in and of itself, is attainable. Second, any amendment will not enter into force until it is approved and ratified by a majority of parties to the NPT, all NWSs, and all parties that are members of the IAEA's Board of Governors at the time the amendment is

¹⁴⁰ See id. at 16 (indicating that the NWSs committed themselves in the 1995 Principles and Objectives document at the NPT Review and Extension Conference to the systematic and progressive efforts to reduce nuclear weapons globally yet there has been little movement on these objectives and the failure to meet these commitments has weakened the NPT regime).

¹³⁸ U.S. Cong., Office of Tech. Assessment, Nuclear Safeguards and the International Atomic Energy Agency, OTA-ISS-615, at 90 (1995).

¹³⁹ Patricia Lewis, Life at 40: Prospects for the NPT and the 2010 Review Conference, ARMS CONTROL TODAY, Mar. 2010, at 15, 19 ("[M]ixed messages will be sent and received on the new Russian nuclear doctrine and the new U.S. Nuclear Posture Review. Even though it is clear to nuance-watchers that both have taken steps in a positive direction and that a reduced reliance on nuclear weapons lies behind each of the documents, for many countries it will be difficult to square the stated claims of being in favor of nuclear disarmament with the continuing dependence on nuclear weapons within the security doctrines of the two countries.").

¹⁴¹ Julian Borger, U.S. and Russia to Propose Ban on WMD in Middle East, GUARDIAN (May 2, 2010), http://www.guardian.co.uk/world/2010/may/02/major-powers-propose-ban-w mds-middle-east.

¹⁴² See, e.g., Steve Rendall, Ignoring the U.S.'s "Bad Atoms," EXTRA! (July/Aug. 2005), available at http://www.fair.org/index.php?page=2619 (criticizing the failure of U.S. media to cover the U.S. violation of Article VI).

 $^{^{143}\,}$ Sarah J. Diehl & James Clay Moltz, Nuclear Weapons and Nonproliferation 63 (2d ed. 2008).

¹⁴⁴ See Williamson, supra note 45, at 133 n.236.
¹⁴⁵ Non-Proliferation Treaty, supra note 1, art. VIII, para. 1.

circulated.¹⁴⁶ Finally, only states that ratify an amendment are bound by its provisions.¹⁴⁷ States party to the NPT that do not approve the amendment remain bound by the previous version of the NPT, meaning that different versions of the NPT would be in force at the same time.¹⁴⁸ These procedural requirements, combined with a lack of political will on the part of Russia and the United States, make amendment of the NPT a near impossibility.

However, Article II could be clarified in a variety of less drastic methods not involving NPT amendment, which is, as a practical matter, unattainable. There is no question that UNSCR 1540 addresses the non-state actor facet of the problem. For example, a commitment by NNWSs not to act as supplyside proliferators could be negotiated in a separate international agreement or in parallel and identical political commitments by heads of state that might then enact national legislation that would make such assistance illegal.¹⁴⁹ The shortcoming of this approach is that it requires NNWSs to embrace an additional nonproliferation obligation at a time when the commitment of the nuclear powers to nonproliferation is being questioned in light of the perceived slow pace of disarmament and the recent U.S.–India Agreement on Peaceful Nuclear Cooperation.¹⁵⁰ And that raises the issue of political will anew. An alternative is to attempt to voluntarily "impose" these

¹⁴⁶ *Id.* para. 2.

¹⁴⁷ *Id.*

¹⁴⁸ See Smith, supra note 103, at 97 ("On the other hand, the amendment would bind only those NPT parties that had ratified it. Existing problems that arise as a result of non-uniform treaty obligations could only intensify under such circumstances."); see also Jozef Goldblat, Amending the Non-Proliferation Regime, DISARMAMENT F., no. 2, 2009 at 37, 39, available at http://www.unidir.org/pdf/articles/pdf-art2862.pdf ("In case of failure of the amendment process, the NPT would continue to be valid in its present form.").

¹⁴⁹ Smith, *supra* note 103, at 99–100.

¹⁵⁰ See Handl, supra note 93, at 10-15 ("Until recently the campaign to universalize [Additional Protocols] may have run up primarily against NNWS' resentment about NWS' lack of progress with respect to nuclear disarmament. With the finalization of the U.S.-India nuclear deal in 2008, another source of friction entered the equation: the emergence within the international nuclear proliferation system of a new category of actor, namely a NWS, which, although outside the NPT, still enjoys benefits exclusively reserved to states parties to that Treaty. This development-perhaps even more so than NWS's laggard compliance with article VI-accentuates the inherent inequality among NPT parties and thereby threatens the very foundations of the non-proliferation regime."); see also Jonas, supra note 1, at 430 ("A visit to almost any NGO Web site which discusses nuclear matters will inevitably reveal criticism of the U.S. for its non-performance of NPT Article VI obligations."). For more on the U.S.-India agreement, see Benjamin Wastler, Note, Having Its Yellowcake and Eating It Too: How the NSG Waiver for India Threatens to Undermine the Nuclear Nonproliferation Regime, 33 B.C. INT'L & COMP. L. REV. 201 (2010). But see Kate Heinzelman, Note, Towards Common Interests and Responsibilities: The U.S.-India Civil Nuclear Deal and the International Nonproliferation Regime, 33 YALE J. INT'L L. 447 (2008).

obligations through the Nuclear Suppliers Group (NSG)¹⁵¹ as a condition of the supply of nuclear technology for peaceful uses.¹⁵² While the NSG guidelines are non-binding, they are generally observed as political commitments by the states that participate.¹⁵³ These are just a few of the ways a supply-side commitment could be addressed by NNWSs. The key point is that by avoiding the NPT amendment process, the possibility of closing the Article II loophole becomes significantly more feasible. But the NSG is not an NPT-based organization and is voluntary as opposed to Treaty-based.¹⁵⁴ Therefore, attempts to use this organization as a solution to the problem may reignite the perennial argument regarding the discriminatory nature of the NPT.

VII. CONCLUSION

Article II of the NPT, which outlines the obligations of NNWSs party to the NPT, contains a significant ambiguity that an NNWS might attempt to exploit to assist other states or non-state actors in the development and acquisition of nuclear weapons. The ambiguity was likely created as a result of the U.S. and Soviet preoccupation with NATO and the MFP, combined with their failure or unwillingness to recognize that any such ambiguity existed. Despite the U.S. and Soviet insistence, the ambiguity is very real and has the potential to lead to the proliferation of nuclear weapons. As previously explained, the German situation would not have been any

¹⁵¹ For a history of the NSG see *History of the NSG*, NUCLEAR SUPPLIERS GROUP, http:// www.nuclearsuppliersgroup.org/Leng/01-history.htm (last visited Nov. 20, 2011).

¹⁵² Cf. IAN ANTHONY ET AL., STOCKHOLM INT'L PEACE RESEARCH INST., RESEARCH REPORT NO. 22, REFORMING NUCLEAR EXPORT CONTROLS: THE FUTURE OF THE NUCLEAR SUPPLIERS GROUP 6 (2007), available at http://books.sipri.org/files/RR/SIPRIRR22.pdf ("The EU member states are also working within the NSG towards making the adoption of the Additional Protocol a condition of supply for nuclear exports."); Michael Spies, *Proposals*, *Positions and Prospects: Issues Facing the 2010 NPT Review Conference*, DISARMAMENT DIPL., Spring 2009, available at http://www.acronym.org.uk/dd/dd90/90nptms.htm ("The EU and the United States have suggested the NSG should adopt a rule requiring nuclear suppliers to incorporate an 'obligation of return' requirement upon NPT violation or withdrawal as a condition of supply.").

¹⁵³ See CIRINCIONE, supra note 5, at 37 ("The forty-four member nations of the [NSG] agree not to ship [items unique to the production of nuclear weapons or materials] to [NNWSs] for use in any unsafeguarded facilities, that is, nuclear installations that are not subject to inspections by the International Atomic Energy Agency.").

¹⁵⁴ See Masahiko Asada, *The Treaty on the Non-Proliferation of Nuclear Weapons and the Universalization of the Additional Protocol*, 16 J. CONFLICT & SECURITY L. 3, 20 (2011) ("Nuclear and nuclear-related exports have mainly been governed by the guidelines of the [NSG], an informal ([i.e.,] not treaty-based) group established in 1975 in response to the Indian nuclear explosions in the previous year.").

different with an Article II obligation not to assist Brazil. It is only an example of how NNWS-to-NNWS commerce has the potential to result in nuclear weapons assistance, contrary to what some drafters of the NPT may have anticipated. Though there is no clear path to addressing the risk and imposing supply-side obligations on NNWSs, either politically or procedurally, awareness of the background and significance of the Article II problem is the key to preventing NNWSs from ever seeking to justify assistance to a non-party NNWS on the grounds that the NPT does not address NNWS-NNWS assistance in express terms. Finally, NPT parties should be on guard to rebut any suggestion that such assistance would be permissible. The U.S. view, which focuses on the need for vigilant enforcement of NPT requirements, remains the optimal approach.