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Shared Responsibility Issues Arising in the Arms Control Law Area

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Shared Responsibility Issues Arising in the Arms Control Law Area

Dan Joyner[*]

1. Introduction

In this chapter, I will be considering the application of a principle of shared responsibility among multiple states and/or other actors who collectively fail to comply with international legal obligations regarding the proliferation of weapons of mass destruction (i.e. chemical, biological, and nuclear weapons) and/or obligations regarding the peaceful use of related technologies.

First a word regarding the issue area scope of this chapter. In the area of chemical and biological weapons proliferation, international legal regulation has been overall very successful. This success is attributable both to the legal regime *per se* (consisting primarily of the 1972 Biological Weapons Convention (BWC),[1] the 1993 Chemical Weapons Convention (CWC),[2] the Organisation for the Prohibition of Chemical Weapons, and parallel customary law), and, as importantly, to the long-standing moral opprobrium attached historically to the use of chemical and biological weapons.[3] Thus, while there are still outliers from the chemical and biological weapons (CBW) nonproliferation regime (e.g. Syria, Iran, Israel, China), cases of collective failure by a number of actors to comply with the rules of the chemical and biological weapons non-proliferation regime in significant ways are, thankfully, a thing of the past. In cases in which there has been a breach of the provisions of the BWC or the CWC, the breach has typically consisted of individual states acquiring prohibited materials or components from private actors,

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[1] Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, London, Moscow, and Washington, D.C., 10 April 1972, in force 26 March 1975, 1015 UNTS 163 (Biological Weapons Convention or BWC).

[2] Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, Geneva, 3 September 1992, in force 29 April 1997, 1974 UNTS 45 (Chemical Weapons Convention or CWC).

[3] D.H. Joyner, *International Law and the Proliferation of Weapons of Mass Destruction* (Oxford University Press, 2009), Chapter 2: 'The Chemical and Biological Weapons Non-proliferation Regimes'.

or unilaterally using chemical weapons on the battlefield (e.g. Iraq at Halabja).[4] I am unaware of any cases of collective breach of these rules, whether cooperative or cumulative, as among multiple states, though of course this is a possibility in the future.

In the area of missile proliferation, there is thus far no multilateral treaty or body of customary international law prohibiting the possession or proliferation of missile technologies. Such broad-based legal sources have encountered difficulty in development due to the inherently dual-use nature of rocket/missile technologies – meaning that these technologies are ubiquitous, and have both significant civilian applications as well as military applications. There are non-binding normative export control regimes in place in this area, such as the Missile Technology Control Regime, however.[5]

Similarly, with few exceptions, the proliferation of conventional weapons is not yet the subject of binding multilateral treaty or customary international law. In 2013, an Arms Trade Treaty (ATT) was adopted by the United Nations General Assembly, and an increasing number of states have signed onto the treaty.[6] The ATT provides obligations for states related to proliferation of small arms and light weapons. It does not prohibit the possession or use of conventional weapons. It is certainly possible that in the future we may see coordinated action by a number of states that falls afoul of the rules of the ATT. However, most cases of proliferation occur, as in the case of chemical weapons noted above, between an individual state recipient, and private party exporters within another state. Nevertheless, it is conceivable that a number of states could potentially become collectively liable under the rules of the ATT in the context of the same conflict, if each state unlawfully fails to prevent exporters of arms within their territory from exporting to a recipient state, in which those arms are then used to commit gross violations of human rights or international criminal law. In such a case, there could be significant utility in describing the (in)action by the exporting states as having given rise to shared responsibility among them, depending upon the amount of coordination present between the exporting states.

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[4] See ibid.

[5] See S. Jones, 'Emptying the Haunted Air: The Current and Future Missile Control Regime', in D.H. Joyner (ed.), *Nonproliferation Export Controls: Origins, Challenges and Proposals for Strengthening* (Aldershot: Ashgate, 2006), 75.

[6] See L. Libman, 'The New Arms Trade Treaty in Brief', 24 April 2013, available at http://lironsblawg.wordpress.com/2013/04/24/the-new-arms-trade-treaty-in-brief/. Arms Trade Treaty, New York, 2 April 2013, in force 24 December 2014 (ATT). This Treaty was adopted on 2 April 2013 by the General Assembly, UN Doc. A/RES/67/234 B (2013).

In the arms control issue area, therefore, shared responsibility can potentially arise in a number of areas of legal regulation, though few instances have in fact been observed yet in state practice. The subject on which there is by far the most material, in terms of both law and actual state practice, for undertaking an analysis of potential shared responsibility for breaches of international law among multiple actors, is the area of nuclear energy and nuclear weapons. I therefore focus my analysis in the remainder of this chapter on this area, and in particular on the cornerstone multilateral treaty in this area, the 1968 Nuclear Non-Proliferation Treaty (NPT),[7] and on the International Atomic Energy Agency (IAEA) which is tasked by the NPT with a specific monitoring and supervision role.

I will begin the chapter with a brief overview of the NPT, and of the obligations undertaken through the treaty by both Nuclear Weapon States (NWS) and Non-Nuclear Weapon States (NNWS). I will then proceed to discuss the concept of shared responsibility, as Nollkaemper and Jacobs have developed it, and its particular application to the area of nuclear arms control. Finally, I will consider specific instances of state practice in this issue area, wherein a concept of shared responsibility arising from a collective breach of the relevant treaties by multiple actors could be usefully applied.

2. The Nuclear Non-Proliferation Treaty

The NPT was signed in 1968, at the height of Cold War tensions. Its purpose was to regulate the inherently multi-use technologies associated with nuclear energy. The three normative pillars of the NPT are the safeguarding and facilitation of states' rights to develop peaceful nuclear energy programmes; the prevention of the spread of nuclear weapons outside of the five recognised nuclear weapons possessing states (the United States, Russia, the United Kingdom, France, and China); and the good faith movement of the nuclear weapons possessing states toward disarmament of their existing nuclear weapons stockpiles.[8]

[7] Treaty on the Non-Proliferation of Nuclear Weapons, Washington, Moscow and London, 1 July 1968, in force 5 March 1970, 729 UNTS 161 (Nuclear Non-Proliferation Treaty or NPT).
[8] See generally D.H. Joyner, *Interpreting the Nuclear Non-Proliferation Treaty* (Oxford University Press, 2011).

One of the defining features of the NPT is that it creates a two-tiered classification of states parties – NWS and NNWS – with both common and differentiated legal obligations attaching to the members of the two categories. The most parsimonious way in which to understand the NPT, is as a grand bargain of quid pro quo obligations as between the two classes of states parties. Pursuant to this grand bargain, NWS commit in Article I not to give nuclear weapons to any state outside their number, and in Article VI agree to move towards complete disarmament of their existing nuclear weapons stockpiles in good faith. They also agree in Article IV to recognise NNWS' residual right to maintain peaceful nuclear energy programmes, and to actively assist them in developing these programmes. In exchange for these promises, NNWS commit themselves in Article II not to manufacture or otherwise acquire nuclear weapons, and in Article III to submit themselves to safeguards, administered by the IAEA, purposed in verifying that all nuclear material within their territory is employed exclusively in peaceful uses.

This quid pro quo nature of the NPT means that it is best understood as a contract treaty between two set of states parties, as distinct from a lawmaking treaty imposing the same obligations on all states parties.

The further development of a theory of shared responsibility is particularly important and useful in the nuclear arms control issue area because of this particular structure of the NPT. Again, the NPT codifies a grand bargain of a quid pro quo swap of obligations between two distinct groups of states parties. Inasmuch as the obligations of the NPT were taken on by the two groups respectively, in return for the obligations of the other group, it is important to consider whether, in addition to potential individual responsibility for breaches committed by one or more states, the two groups of states, or significant sub-groups of them, *qua groups*, have collectively failed to meet their obligations under the treaty. This adds a separate and independently meaningful level of analysis to state practice in this area.

In a quid pro quo structure of obligations such as that in the NPT, which could be described under the paradigm of a contract treaty, the collective failure of one distinct group of treaty parties to uphold their obligations could have particular effects upon the entirety of the grand bargain of exchanged promises between the groups of states, independently and in addition to an assessment of the individual breaches of particular states. It is thus particularly relevant and

important to develop a legal framework for understanding the shared responsibilities of multiple states and/or international organisations for internationally wrongful acts in this context.

3. Shared responsibility

Before moving on to specific NPT issues, however, I would like to place the dynamics of the nuclear arms control issue area in the wider context of shared responsibility, as developed by Nollkaemper and Jacobs,[9] which provides the overall framework for this this volume.

The volume as a whole is primarily concerned with legal frameworks for shared responsibility of states and international organisations for unlawful acts, but it recognises the involvement of non-state actors in the respective issue areas. Like most other issue areas of international legal regulation, the nuclear arms control issue area is comprised of actions and transactions, and legal rights and obligations, of both public entities (states and international organisations) and private entities, including businesses and individuals.

A holistic view of the issue area, and legal regulation related thereto, at both the international and domestic levels, would involve a complex and interrelated analysis of binding public international law; the role and actions of international organisations including the United Nations and the IAEA; non-binding international normative regimes including the Nuclear Suppliers Group; and the national laws and administrative frameworks of states relevant to myriad business actions and transactions related to the production, distribution, safety, export, and monitoring of thousands of both single use (i.e. only military applications) and dual use (i.e. both civilian and military applications) items and technologies that can be used in nuclear energy and nuclear weapons programmes. Pursuant to these various sources of both domestic and international law, it would be possible to identify various forms of legal responsibility, both civil and criminal, independent and shared, of states, businesses and individuals for a violation of applicable laws.

[9] P.A. Nollkaemper and D. Jacobs, 'Shared Responsibility in International Law: A Conceptual Framework' (2013) 34 MIJIL 359.

I will try to capture some of this complexity as I proceed in this chapter, but in keeping with the focus of this volume, I will focus on the question of shared responsibility of states and international organisations for actions in violation of public international law.

The complexity of actors in the nuclear arms control area, and the possible consequences for shared responsibility, can be explained by the same factors that Nollkaemper and Jacobs' identify as contextualising or explaining the 'increase in situations of shared responsibility'. As they write:

> In combination, the four trends identified explain the increased frequency in which questions of shared responsibility arise. They also influence the rise in instances in which such questions will actually be addressed by international or national institutions. Finally, they shape the development of international legal principles and procedures that relate to shared responsibility.[10]

Each of the four identified underlying dynamics is present in the nuclear arms control issue area. Firstly, interdependence. The nuclear arms control issue area is intimately linked to trade flows in goods and technologies that can be used in either nuclear energy or nuclear weapons development programmes. The forces of globalisation, the increasing interdependence of national economies, and the cross-border nature of supply chains, have been powerful forces shaping the dynamics of trade in these goods and technologies, just as in all other areas of international trade. It would today be impossible to find a nuclear energy programme, or a nuclear weapons programme for that matter, in any nation, that was not the physical product of at least some items and technologies originating in the private sector and sourced across a national border. Trade in nuclear technologies and materials is big international business, and this of course leads to a result of many different actors, both public and private, being involved in the development and maintenance of any particular nuclear energy or nuclear weapons programme. As I will explain further below, this underlying dynamic has particular relevance to shared responsibility by states in the area of Article IV of the NPT, and the inalienable right of all states to possess peaceful nuclear energy technologies, with the corollary obligation of supplier states to share these technologies with developing states in particular.

[10] Ibid., at 379.

Secondly, one can definitely see the phenomenon of moralisation, as identified by Nollkaemper and Jacobs, in the nuclear arms control area. Here it manifests in an undeniably hypocritical moralisation by powerful nations who already possess nuclear weapons, of the principle of non-proliferation of nuclear weapons, or preventing the spread of nuclear weapons to and among developed countries. This ideological supplementation of what was originally simply a negotiated treaty obligation, and part of a quid pro quo grand bargain of exchanged promises, has resulted in a disproportionate focus upon and prioritisation of non-proliferation as a goal of the international legal regime governing nuclear energy and nuclear weapons, over the two other core principles of that regime, and of the NPT as its cornerstone – namely the principles of peaceful use of civilian nuclear energy technologies, and disarmament of the existing nuclear weapons stockpiles of nuclear weapon possessing states.

This phenomenon has produced significant and perverse results in state practice in this area. It has, for example, given rise to a disproportionate emphasis and prioritisation in state practice and policy on accountability for non-proliferation-related non-compliance with international legal obligations, and at the same time a marginalisation and de-emphasis upon accountability for non-compliance related to the other two core principles, typically committed by powerful states. Such results raise a number of obvious problems in this context as in others, for example in identification of 'the international community' that gets to decide what the 'hierarchy of norms' should be. In the nuclear arms control area, we arguably have a situation in which by far the minority of states (i.e. the powerful) have been successful in framing the narrative of morality, against the views of the majority of states (i.e. developing states).

Third, as noted previously in the context of interdependence, the nuclear arms control issue area is one in which there has been a substantially increased heterogeneity of actors in recent decades, with sourcing of materials and technologies for both nuclear energy and nuclear weapons programmes increasingly shifting away from public sources to private industry. International organisations including particularly the United Nations Security Council and the IAEA play central roles in this area in legal capacities, monitoring and verifying state compliance with international legal obligations, and in some cases enforcing those obligations.

Fourth, the various legal regimes operating in this issue area – i.e. international vs. domestic; general vs. treaty specific vs. international organisation-based – do display permeability in their

interaction with each other in complex ways. To my mind this is a similar phenomenon to that commonly termed the phenomenon of fragmentation of international law. I have written previously on this topic in the specific context of the nuclear arms control issue area.[11]

So again, I find the four underlying dynamics that, according to Nollkaemper and Jacobs, bear much of the explanatory burden for the increase in situations of shared responsibility which they perceive, to be clearly present in the nuclear arms control issue area. It remains, however, to describe how a theory of shared responsibility might best be applied to the particularities of arms control law, and nuclear arms control law in particular.

In this vein, I would take particular note of Nollkaemper and Jacobs' proposal for a reconceptualisation of shared responsibility, employing a differentiated system of responsibility on the basis of the differentiated nature and structure of the relevant obligations. As they explain:

> In sum, we argue that we must recognize that different principles of responsibility may apply in such areas as military operations, refugee law, and environmental law. Each of these areas has its own set of primary obligations relevant to questions of shared responsibility as well as its own private and public law dimensions; a differentiated approach to shared responsibility seems inevitable.[12]

This proposal is in complete harmony with the arguments that I have made above and in my other writings, regarding the particularities of the structure of the NPT – i.e. the contractual, quid pro quo nature of the obligations codified in the NPT – and the special implications which therefore attach to a collective breach of core obligations of the NPT by one of the two defined groups of states under the treaty.[13]

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[11] D.H. Joyner and M. Roscini (eds.), *Non-Proliferation Law as a Special Regime: A Contribution to Fragmentation Theory in International Law* (Cambridge University Press, 2012).

[12] Nollkaemper and Jacobs, 'Shared Responsibility in International Law', n. 9, at 421.

[13] Joyner, *Interpreting the Nuclear Non-Proliferation Treaty*, n. 8. It should be clear that this classification as a contract treaty, and not a lawmaking treaty, does not in any way affect the binding nature of the commitments entered into by the states parties to the NPT under international law. Nor does it result in different rules of interpretation being applied to the treaty. However, this difference in classification of the NPT can have an impact upon the actual interpretation and application of the NPT's terms. While the same VCLT rules on interpretation, contained in Articles 31 and 32, apply to treaties under both the contract and lawmaking classifications, as Rudolph Bernhardt has explained those rules may properly be applied to produce differing results depending upon a treaty's classification. See R. Bernhardt, 'Treaties', in R. Bernhardt (ed.), *Encyclopedia of Public International Law*, Vol. IV (Amsterdam: Elsevier Publishing, 2000), at 928-929; R. Bernhardt, 'Interpretation in International Law', in R. Bernhardt (ed.), *Encyclopedia of Public International Law*, Vol. II (Amsterdam: Elsevier Publishing, 1995), at 1421-

I will proceed, therefore, to consider specific cases of state practice in areas relevant to NPT law wherein, in consideration of the particular nature and structure of the obligations of the NPT, a concept of shared responsibility arising from a collective breach of the relevant treaties by multiple actors, could be usefully applied. I will further comment on the precise application of such a concept to the relevant state practice.

4. Specific issues of shared responsibility

Perhaps the best way to structure this analysis will be to examine particular groups of states and their relevant state practice, and consider with regard to each group whether and to what extent a concept of shared responsibility could be usefully applied.

4.1 Nuclear Weapon States

First, then, I will consider the state practice of the NWS parties to the NPT relative to the treaty on a number of different issues. One such issue is the collective failure of NWS particularly to comply with their obligations in Article VI of the NPT relating to disarmament of existing nuclear weapons stockpiles. Article VI imposes on all NPT states parties individually the obligation to move towards disarmament of their nuclear weapons stockpiles in good faith.

Notwithstanding the fact that this obligation is binding upon all NPT states parties, it is clearly most relevant to those states parties that have nuclear weapons stockpiles, i.e. the NWS. One level of analysis, which I have undertaken elsewhere, is the question of whether the NWS are individually liable for a violation of the Article VI obligation to disarm. However, there is a second possible level of analysis, and that is whether the NWS are, additionally, *collectively* responsible for this violation, and if so what separate or additional implications would this collective responsibility have under the NPT legal regime?

1422. Among the implications of the contract treaty nature of the NPT, as an element of the context of its terms, are the unique results of a material breach of a contract treaty by a category of states parties. When considering a multilateral lawmaking treaty, a material breach by one party or a group of parties may or may not serve to so significantly affect the interests of the other parties to the treaty, that they will be able to suspend the operation of the treaty as between themselves and the state(s) in breach, or terminate it outright. See further text to n. 17.

This analysis would have to begin with a consideration of the interaction between NWS in their policies and actions on this issue. To what extent if at all are their actions coordinated? And what significance should be attached to the answer to this question? Here again, Nollkaemper and Jacobs provide useful analytical tools through their distinction between cumulative and cooperative responsibility. As they explain:

> Instances of shared responsibility can be divided into two groups. Our main interest is in shared responsibility that arises out of joint or concerted action. We refer to such instances of shared responsibility as *cooperative responsibility*. This covers such examples as coalition warfare, joint patrols … Occurrences of shared responsibility also can arise when there is no concerted action. For these cases, we adopt the phrase *cumulative responsibility*. In such cases, we recognize the need for the injured party or parties to be able to make claims against several entities, despite the fact that these entities acted independently from each other. Examples of such scenarios include pollution of an international watercourse caused by two or more riparian states and climate change caused by emissions from several states that contravene obligations under the Kyoto Protocol.[14]

The extent to which NWS coordinate their national policy and practice on nuclear weapons disarmament is a difficult question to gauge. However, some coordination at least can be found in the regular collective statements made to NPT review conference meetings, in which all five NWS speak in one voice concerning NPT related issues including disarmament.[15] This is relatively weak evidence of actual coordination of policies and actions, however.

On this subject, therefore, it would be useful to adopt a cumulative responsibility paradigm. The concept being that, even without evidence of direct coordination or cooperation in their actions, nevertheless the actions of the group have implications for injured states in addition to the actions of each individual violating state respectively. An analysis of the actions of each of the NWS individually can be argued to show that each state individually is in violation of its obligations pursuant to Article VI of the NPT.

In addition to that individual liability, as explained above, within the particular context of the NPT, the fact that every member of this identified group, comprising one of the two identified groups between whom promises are swapped under the treaty, is in violation of this core obligation, could also very usefully and parsimoniously be found to constitute cumulative shared

[14] Nollkaemper and Jacobs, 'Shared Responsibility in International Law', n. 9, at 368-369.
[15] See an example in Joyner, *Interpreting the Nuclear Non-Proliferation Treaty*, n. 8, at 51.

responsibility for violation of one of the essential elements of the quid pro quo grand bargain of the NPT. This shared responsibility could have particular implications under the NPT's contractual structure, including grounds for suspension of the treaty by injured states – i.e. the NNWS.

As I have written elsewhere, Article 60 of the 1969 Vienna Convention of the Law of Treaties (VCLT)[16] addresses the consequences of multilateral treaty breach, and provides that in the event of a material breach by one party, the non-breaching parties to the treaty must unanimously agree in order to suspend or terminate the treaty. The only ways for an individual party, or non-unanimous group of parties, to lawfully suspend their observance of the treaty in this situation are for the aggrieved state(s) to argue that they are 'specially affected' by the breach, or that the breach 'radically changes the position of every party with respect to the further performance of its obligations under the treaty'. In the case of a multilateral lawmaking treaty, these latter arguments for suspending observance of the treaty, absent unanimous agreement among the treaty parties, will be difficult to make. However, in the case of a contract treaty, such as the NPT, because of the quid pro quo reciprocal structure of the treaty's commitments, a material breach by one or a group of states parties will almost certainly strike at the heart of the treaty's object and purpose, and will much more easily be argued to 'specially affect' the non-breaching states parties, and to 'radically change' the position of every party with respect to the further performance of its obligations under the treaty. Thus, a material breach by one party, and *a fortiori* an entire category of states parties to a contract treaty, will provide strong arguments for the aggrieved category of parties to the treaty, individually or collectively, to suspend the operation of the treaty as between themselves and the breaching state(s), pursuant to Article 60(2)(c) VCLT.

These consequences of non-compliance, though governed by the law of treaties, are relevant to the present volume in that they point to an alternative set of consequences, next to those under the law of responsibility, that may arise when multiple states act in breach of their obligations. It could be argued that comparable consequences may exist under the law of responsibility, since a

[16] Vienna Convention on the Law of Treaties, Vienna, 23 May 1969, in force 27 January 1980, 1155 UNTS 331 (VCLT).

violation by multiple states might, jointly breach an obligation towards an injured state who then would be entitled to claim, for instance, performance of the obligation breached.

4.2 Supplier states

Another issue involving NWS parties to the NPT is the collective failure of nuclear technology supplier states parties to the NPT (including the NWS but also many other developed states with advanced technology) to cooperate with NNWS in contributing to their peaceful use of civilian nuclear energy, as required by Article IV(2) of the NPT. Article IV(2) provides that NPT states parties 'in a position to do so shall also co-operate in contributing alone or together with other States or international organizations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world'.

Although not formally a part of the NPT treaty regime, shortly after the NPT's entry into force, a group of NPT member supplier states gathered for the purpose of clarifying the technical implications of NPT export controls, as well as to establish a continuing forum for interpretation of Article III.2's broad export control provisions.[17] This meeting was the nucleus of a group which came to be known as the 'Zangger Committee'. The Zangger Committee continued to meet periodically and eventually established both a set of Understandings, adopted by all committee members, and a Trigger List composed of items the export of which should 'trigger' the requirement of safeguards.

In 1975, a new group of supplier states was formed which eventually came to essentially replace the Zangger Committee and carry on its harmonising role in the field of nuclear export controls. Over successive meetings, this group became known unofficially as the 'London Club', and officially as the Nuclear Suppliers Group (NSG). The NSG Guidelines incorporated the Zangger Committee Trigger List and largely mirrored the Zangger Committee's Understandings, with the notable addition of going beyond the context of the NPT to cover nuclear transfers to any non-

[17] See generally D.H. Joyner, 'The Nuclear Suppliers Group: History and Functioning' (2005) 11(2) ITLR 33; D.H. Joyner, 'The Nuclear Suppliers Group: Present Challenges and Future Prospects' (2005) 11(3) ITLR 84.

nuclear weapon state. The NSG Guidelines further tightened export control standards in a number of areas including in the transfer of nuclear facilities and technology supporting them.[18]

In 1992, the NSG produced a supplementary regime for the coordination and harmonisation of national export controls on dual-use items, i.e. those materials and technologies with both legitimate commercial as well as potential WMD-related use. The NSG arrangement for dual-use nuclear export controls, now referred to as 'NSG Part 2', consists of a set of Guidelines for transfers of nuclear dual use items and a list of approximately 65 items including equipment and technology. The basic principle of the Guidelines states that suppliers should not authorise transfers of equipment, materials, software or related technology identified on the list if 1) they are to be used by a non-nuclear-weapon state in a nuclear explosive activity or an unsafeguarded nuclear fuel cycle; 2) there is in general an unacceptable risk of diversion to such an activity; or 3) when the transfers are contrary to the objective of averting the proliferation of nuclear weapons.[19] Other important provisions in the Guidelines specify criteria for assessing the risk level specified in the basic principle, and conditions for transfers and re-transfers (i.e., end-use statements or assurances of non-use for explosive or unsafeguarded nuclear fuel cycle activity). The NSG currently is comprised of 47 participating states, including all of the major nuclear supplier states in the world.

The efforts of these supplier states, including all of the NWS, through the NSG, have arguably erected coordinated restrictions on the access of NNWS developing states to nuclear materials and technology, at a level and scope constituting a violation of the NPT Article IV(2) obligation. These restrictions include coordinated denial of enrichment and reprocessing technologies, and a requirement on NNWS to conclude an Additional Protocol with the IAEA as a condition of supply.[20]

Due to the openly coordinated nature of these policies and actions by supplier states through the NSG, it would be appropriate in this context to apply a paradigm of cooperative collective responsibility for violation of Article IV(2) of the NPT. The implications of this determination of collective responsibility for breach of a core obligation of the NPT would, I think, be very similar

[18] See T. Strulak, 'The Nuclear Suppliers Group' (1993) 1(1) NPR 2.
[19] Ibid., at 5.
[20] D.H. Joyner, 'Why Nuclear Supplier States are in Collective Breach of the NPT', 24 April 2013, available at http://armscontrollaw.com/2013/04/24/why-nuclear-supplier-states-are-in-collective-breach-of-the-npt/.

to those observed in the context of NWS' collective violation of Article VI. The one complicating factor in the Article IV(2) context is that supplier states who are placed under the Article IV(2) obligation, constitute a larger and more diverse group of states than the NWS group. However, since in my view every supplier state member of the NSG has, through application of the NSG's Guidelines and Trigger List, acted at variance to the Article IV(2) obligation, there should be special implications for the collective failure of the entirety of the identified group subject to the obligation in the treaty, to uphold that obligation. The same Article 60 VCLT analysis, including the creation of grounds for suspension of the treaty's application by NNWS, should also apply to this case. As noted above, it could be argued that in such cases it also would be possible for an injured state to invoke the responsibility of all wrongdoing states – under the principle of Article 47 ARSIWA,[21] these states would all be individually responsible for their own wrong.

4.3 Non-Nuclear Weapon States or groups of NNWS

With regard to the NNWS group of states parties to the NPT, or possibly to sub-groups of particular NNWS, determining collective responsibility for breaches of NPT regime obligations is considerably more difficult. The core obligations of the NNWS under the NPT are found in Articles II and III, and consist of obligations not to manufacture or otherwise acquire nuclear weapons, and obligations to maintain effective export control systems and conclude a safeguards agreement with the IAEA.

It is possible to conduct an analysis regarding each of these obligations, and to find in the state practice of individual NNWS violations, or at the least non-compliance, with NPT or IAEA-related obligations. As a non-exhaustive list of examples: first, North Korea may have violated its obligations under both Articles II and III prior to its withdrawal from the NPT, by both constructing a nuclear weapon and selling fissile material and related equipment to unsafeguarded nuclear programmes in other states. Second, Libya, South Korea, and Iran have at times been in non-compliance with their IAEA safeguards agreements. Third, Syria may have violated Article III of the NPT and has been non-compliant with its IAEA safeguards agreement through the unsafeguarded building of an undeclared reactor at Al-Kibar, with the assistance of

[21] Articles on Responsibility of States for Internationally Wrongful Acts, ILC *Yearbook* 2001/II(2) (ARSIWA).

North Korea. Fourth, Malaysia and the United Arab Emirates may have violated Article III(2) of the NPT through the implication of their territories in the Pakistan-based A.Q. Khan proliferation ring.[22]

As this last example illustrates, the proliferation of nuclear weapons related materials and technologies is often a cross-border affair, potentially involving public or private actors, or both, in a number of different NNWS. These actors may in some cases coordinate their actions in a cooperative manner.

However, finding shared responsibility of NNWS, or even sub-groups of NNWS, is difficult for a number of reasons. First, it is difficult to identify cases in which NNWS states acted at the state level in either a cumulative or cooperative manner to produce a collective violation of the NPT or IAEA safeguards agreements. While individual states' violations of relevant rules can certainly be identified, collective violations are rarely if ever manifest.

The issue is further complicated by the non-universality of the membership of the NPT, and the existence outside the regime of a number of states of high proliferation concern. These include both North Korea and, again, Pakistan, which was the base of operations of the A.Q. Khan network, which proliferated sensitive materials and technology to a number of other NNWS. With regard to both named states, there may be instances in which there would be at least bilateral shared responsibility with other NNWS for violation of NPT rules if Pakistan or North Korea were parties to the NPT. But since they are not, this determination of course cannot be made.

There is also the complicating aspect of the involvement of non-state actors in these proliferation cases. Non-state actors can be either the proliferator (e.g. arguably in the case of the Khan network), the proliferatee (e.g. the Al Qaeda terrorist network has been trying to acquire nuclear weapons for years), or both. However, in present international law such non-state actors generally are not subject to legal obligations pertaining to non-proliferation, limiting the possibility of shared responsibility between states and non-state actors.

[22] Joyner, *International Law and the Proliferation of Weapons of Mass Destruction*, n. 3, at xviii.

In summary, while individual violations of NNWS of obligations contained in the NPT/IAEA legal regime can be identified, shared responsibility among multiple actors in this group are difficult to determine. And even if the shared responsibility of two or even three NNWS for collective breach of NPT/IAEA rules could be determined, the special implications which attach to NWS or supplier state collective breaches of core NPT obligations as outlined above, would not apply to such NNWS cases, as they would not constitute violations by the entirety of an identified group of states under the NPT.

Thus, shared responsibility for a collective breach of the NPT would not appear to be particularly useful as a concept for situations of NNWS' breach of the NPT regime.

5. Conclusion

Shared responsibility is a concept of particular utility in the nuclear arms control law area. As demonstrated, it is useful in adding an important secondary layer of analysis regarding responsibility of states for violations of NPT related rules in particular. More specifically, it is an important concept for exploring and fully appreciating the regime-specific implications of collective breaches of the NPT by NWS parties, and by supplier states parties to the NPT.