



# Weapons of Mass Destruction and the United Nations: Diverse Threats and Collective Responses

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## Executive Summary

- The proliferation of nuclear, biological, chemical weapons (NBC) remains as a profound problem for the international community for a number of reasons. Efforts to newly acquire such weapons typically indicate that an inter-state dispute has fallen into a “downward spiral” of obduracy and mutual estrangement, breeding intensified fears of malign intentions, and undermining the possibility for the cooperative pursuit of regional interests and the peaceful use of advanced nuclear, biological, and chemical technologies. Terrorist acquisition of such weapons is constrained, but not inconceivable. NBC terrorism is an acute threat, because terrorists are more likely to use weapons as soon as possible after acquiring them, rather than maintaining them for deterrence. Differences in perceptions of the threat of NBC proliferation and in the adequacy of the UN to deal with such threats have forced the organization to search for a redefinition of its role.
- Regimes for the nonproliferation of NBC face a crisis in two dimensions. The first dimension involves a series of startling revelations about the extent and linkages of weapons programs around the world. These revelations have occurred against a backdrop of both positive and negative trends in relation to state-based programs. But increases in the availability of requisite technology and the likelihood of massive terrorist attacks have produced a heightened perception of NBC threats. The question remains whether this heightened perception will be translated into a strengthened nonproliferation framework.
- The second dimension of the crisis concerns the ability of the international community to devise effective responses. This dimension is defined by the rigid bipolar debate over “unilateral versus multilateral” responses. Ad hoc and coalition efforts have been initiated outside the multilateral framework, particularly by the US, in response to the seeming inadequacies of multilateralism. Critics of such initia-

tives claim that they bypass and erode the multilateral framework, which is essential for the long-term reduction of NBC threats. The key challenge for the international community is to reconcile the different roles of unilateral, bilateral, “plurilateral” (i.e. multinational, but not within the multilateral framework), and multilateral instruments to provide for a comprehensive response.

- Since its inception, the UN has been central in generating institutional responses to NBC threats, from the establishment of the UNAEC in 1946 to the passing of UN Security Council Resolution 1540 in April of this year. The UN Security Council (UNSC), however, has been irresolute when faced with concrete proliferation problems, mostly because of Permanent Five disagreements. Despite the intentions of UNSC Resolution 1540, a number of current institutional deficiencies will likely contribute to continued irresoluteness: (1) the lack of an inspections regime; (2) the lack of criteria to assess proliferation threats; and (3) the lack of a basis in international law to enforce nonproliferation norms for states outside of the treaty regimes.
- The multilateral regimes for NBC and their delivery systems each share three common objectives: (1) promotion of peaceful uses of technology, (2) non-proliferation, and (3) disarmament. The relationship between these three objectives—whether they are mutually reinforcing or contradictory—has been a fundamental source of disagreement in the international community. In addition, it is clear that these regimes are inadequate for addressing threats from non-state actors. Efforts to elaborate the relationship between these regimes and the terms of UNSC Resolution 1540 (including the newly-established Committee) will be required to overcome this inadequacy.
- The nuclear non-proliferation regime’s effectiveness is limited by a number of gaps, including (1) the absence of an administrative body and the existence of a “reactive” review process and (2) the de facto delegation of nonproliferation verification to the International Atomic Energy Agency (IAEA) despite the incongruity between the objectives of the IAEA and the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The role of the UNSC is constrained by this uneasy IAEA-NPT relationship. Under such conditions, the current regime can do little to prevent proliferators from developing a “break-out” capacity. In addition, the regime’s legitimacy suffers from a lack of progress on the “grand bargain” connecting nonproliferation to disarmament and peaceful-use promotion. It also suffers from the undefined status of the “de facto nuclear weapons states”.
- The Biological Weapons Convention (BWC) amounts to “little more than a gentleman’s agreement,” with policy lagging far behind technological developments. Discussions on strengthening verification measures have been halted as a result of disagreements over proper investigation approaches. The dual-use nature of the requisite technology makes it difficult to judge intentions through technical means; the judgment remains a political decision based on trust. The BWC gives the UNSC a role in investigating non-compliance, but enforcement provisions are not defined.
- The Chemical Weapons Convention (CWC) has established a robust implementation framework quite independent of the UN. Nonetheless, much work remains to be done in actual implementation, including achieving universality (i.e. getting all states to sign on), ensuring proper reporting on exports and imports, and destroying existing stockpiles. Also, several verification mechanisms of the CWC have yet to be tested. The failure to use these tools now could increase the political costs of using them in the future.
- Sound interpretation of the benefits, drawbacks, and complementarity of “unilateral” and multilateral approaches is necessary. The full implementation of multilateral frameworks requires the adoption of extensive “unilateral” measures in order to be effective instruments. State parties to the NPT, CWC and BWC can implement their treaty obligations through bilateral and plurilateral arrangements, such as export and trans-shipment control measures, and must take individual action to develop domestic laws. A challenge for the international community involves reconciling the different roles of unilateral, bilateral, plurilateral and multilateral instruments to provide for a comprehensive response to proliferation threats.
- But broad and transparent compliance with nonproliferation norms over the long term is not sustainable if a small group of states continually imposes nonproliferation demands on other states without

respecting the bargains of the multilateral framework. Private sector and industrial interests should be addressed in relation to this reality. A level playing field for commercial competition in peaceful advanced technologies will minimize the possibility that commercial interests will interfere with nonproliferation.

- Given the gravity of recent proliferation threats, the need for new international principles and concepts is pressing. One such concept is “cooperative threat reduction” (CTR), which has aimed to dismantle weapons systems and NBC materials that linger from past conflicts (e.g. the Cold War) in order to minimize future risks. Another such concept is “universal compliance,” which shifts the normative basis of nonproliferation regimes from universal membership, “equal treatment,” and “sovereign equality” to legitimate discrimination against those who do not live up to commitments.

## I. Introduction

The proliferation of nuclear, biological, chemical weapons (NBC)<sup>1</sup> remains as a profound problem for the international community. At the interstate level, efforts to newly acquire such weapons breed intensified fears of malign intentions. These effects undermine the possibility for the cooperative pursuit of regional interests and the peaceful use of nuclear, biological, and chemical technologies. The possibility of terrorist acquisition of NBC provides a new dimension to the threat posed by these weapons. Though terrorist acquisition of such weapons is constrained (as discussed below), it is not inconceivable. NBC terrorism is an acute threat, because terrorists are more likely to use weapons as soon as possible after acquiring them, rather than maintaining them for deterrence.

The United Nations is at the center of current NBC proliferation challenges. As many member states and the Secretary-General himself have observed, the UN has reached a crucial juncture. Some argue that its relevance – even its very existence – is at stake. Whether or not one shares this assessment, it is undeniable that the world body must take measures to adapt to current threats and challenges in peace and security. One of the most pressing questions is how to address the threat posed by NBC proliferation. A bitter divide within the UN community, evident over the past decade, came to a head with the Iraq crisis. The diplomatic fallout continues to complicate efforts to shape consensus. Some countries argue that progress can only be attained through institutional reform and strengthening multilateral regimes. Others argue that in the meanwhile, stop-gap measures, including preventive military action and coalition efforts outside the multilateral framework, may be required.

As a response to the sense of urgency surrounding these issues, two major international initiatives have been launched. In September 2003, the Secretary-General announced the establishment of a High-Level Panel of Eminent Persons to “examine today’s global threats and provide an analysis of future challenges to international peace and security...[to] identify clearly the contribution that collective action can make in addressing these challenges...[and to] recommend the changes necessary to ensure collective action.” NBC proliferation is a major area of investigation in this Panel’s work.<sup>2</sup> Also, the Government of Sweden has created a Weapons of Mass Destruction Commission to examine the whole range of threats and responses posed by nuclear, biological, chemical, and radiological weapons, and “to present realistic proposals aimed at the greatest possible reduction of the dangers of weapons of mass destruction.”<sup>3</sup> These two initiatives provide an important opportunity for the international community to find

<sup>1</sup> The term “weapons of mass destruction” poses a conceptual issue in itself. Nuclear, biological, and chemical weapons vary greatly in their technical aspects, ease of acquisition and development, and their potential to cause “mass destruction.” The treatment of these weapons as a single threat category can lead to distorted analysis and, as a result, flawed institutional responses. Nonetheless, government officials and experts alike continue to refer to and assess nuclear, biological, and chemical weapons as a whole (either as “WMD” or as “NBC”) for a number of reasons. First, acquisition of such weapons corresponds to a number of common aims, including deterring regional adversaries, equalizing conventional weapons asymmetries, and achieving high international stature. In this sense, proliferation of these weapons may be positively correlated with regional conflicts, military power asymmetries, and possession of WMD arsenals by influential states. Second, the threats posed by these weapons often emanate from the same actors. Proliferating states and non-state actors typically seek to acquire different types of WMD/NBC concurrently. Third, the challenges of halting the proliferation of these weapons are similar and related. Key tasks in halting such proliferation include easing security concerns, breaking up clandestine supply networks, and controlling dual-use technology. Thus, as much as one needs to unpack the concept of “weapons of mass destruction”, one must also recognize that nuclear, biological, and chemical weapons should not be considered in complete isolation from each other. With this point in mind, and in an effort to increase clarity, this report will refer to nuclear, biological, and chemical weapons by the acronym NBC *whenever it makes sense to analyze these weapons collectively*. The acronym NBC+R will be used in some sections when the threat of radiological weapons is part of the discussion.

<sup>2</sup> For Panel’s mandate and composition, see UN Press Release SG/A/857, available at <<http://www.un.org/News/Press/docs/2003/sga857.doc.htm>>. Acknowledgment of NBC as a major area of investigation has come through unofficial updates and announcements on the Panel’s work.

<sup>3</sup> For the Commission’s mandate and composition, see WMD Commission Information Briefing, Stockholm, December 16, 2003, available at



(l-r) Mr. Henry D. Sokolski, Ms. Rebecca Johnson, H.E. Sir Emyr Jones Parry, Dr. Jayantha Dhanapala, Mr. Gustavo Zlauvinen, and The Hon. Marian Hobbs

avenues to strengthen a troubled set of non-proliferation regimes.

Endeavoring to inform the work of the Panel and the Commission and to heighten awareness of key nonproliferation issues in the UN community, the Government of New Zealand and the International Peace Academy convened a conference in New York on “Weapons of Mass Destruction and the United Nations: Diverse Threats and Collective Responses” on 5 March 2004. The conference examined the threats posed by NBC as well as issues related to delivery systems, notably missiles, and terrorism. By bringing together experts from academia, the UN system, governments, and civil society, the conference sought to provide assessments of the threats posed by these weapons, identify the gaps in treaty regimes, evaluate the range of possible institutional responses, and identify areas in which the United Nations could play a more effective role.

This report provides a synthesis of the discussions at the conference. Section II describes recent developments that make for a “dual crisis” in NBC proliferation and non-proliferation. Section III provides an evaluation of the multilateral framework and the role of the United Nations in their ability to provide a basis for action in the face of this dual crisis. Section IV examines possibilities for improving the capacity for effective institutional

responses. Concluding the report, section V consists of implications for collective action.

## II. A Dual Crisis in Proliferation and Non-proliferation

The international regimes for NBC nonproliferation face a crisis in two dimensions. The first dimension can be labeled the “proliferation threat” dimension. It involves a series of startling revelations about the extent and linkages of NBC programs around the world. The potential for proliferation has increased significantly as a result of high rates of technological development, especially in the field of biotechnology, and broad diffusion of existing technology, such as uranium enrichment and spent fuel reprocessing. Increased availability of requisite technology and the increasing scale in the lethality of terrorist attacks suggest that NBC terrorism may be a more acute threat than previously considered. Past proliferation shocks—such as after the first Gulf War—have triggered support for enhancing institutional responses. Given today’s heightened perception of NBC threats and recent proliferation crises, there should be opportunities for collective action. However, coherent collective responses have been slow in coming.

The second dimension can be labeled the “international response” dimension. It involves the rigid bipolar debate over “unilateral versus multilateral” responses. After the Cold War, many assumed that the existing multilateral framework for disarmament and non-proliferation would be sufficient. This assumption began to unravel through the 1990s due to weaknesses in the multilateral system exposed by the proliferation challenges posed by Iraq, North Korea (DPRK), India, and Pakistan. A number of international non-proliferation efforts have been launched since the end of the Cold War and especially in the past few years.<sup>4</sup> But in their current form, many of the most recent efforts do little to bolster the multilateral framework. This has generated a rigid bi-polar debate on the legitimacy and effectiveness of “unilateral” versus multilateral responses to proliferation. The debate is largely driven by disagreements on whether the weapons themselves or the possession of weapons by specific states pose the real proliferation threats. States holding the former viewpoint call for a

<<http://www.acronym.org.uk/dd/dd75/75news04.htm>>.

<sup>4</sup> Among these post-Cold War initiatives are the Ad Hoc Group negotiations to strengthen the Biological Weapons Convention, the negotiation and enactment of the Chemical Weapons Convention, the establishment of the International Atomic Energy Agency’s Additional Protocol for safeguards agreements, the indefinite extension of the Treaty on the Non-proliferation of Nuclear Weapons, the negotiation of the Comprehensive Test Ban Treaty. In addition to these multilateral efforts, other coalition initiatives have also been launched in the past decade and a half, including the Comprehensive Threat Reduction initiative, the G-8 Global Partnership, the Proliferation Security Initiative, as well as measures to strengthen the Nuclear Suppliers Group and the Australia Group.

broad-based approach through the treaty regimes and eventual disarmament. Those promoting latter viewpoint criticize the principles of nondiscrimination and “peaceful use” enshrined in the treaty regimes. These states call for ad hoc approaches that can be tailored to a specific case. At the heart of the debate, however, are fundamental disagreements on the parameters for and role of unilateral and multilateral responses. Disagreements on the appropriate means to address proliferation have produced a stalemate in collective action.

### **Proliferation threats: what has changed since the end of the Cold War?**

The facts from the past decade and a half do show a number of positive trends. The number of states currently seeking NBC—and nuclear weapons in particular—is far less than predicted during the Cold War.<sup>5</sup> Argentina, Brazil, and South Africa, hold-outs from the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) until the early 1990s, voluntarily renounced nuclear weapons and placed their nuclear programs and materials under IAEA safeguards; South Africa even dismantled existing nuclear devices. The Newly Independent States of the former Soviet Union agreed to transfer inherited arsenals to Russia and signed the NPT as non-nuclear weapons states. Since the Chemical Weapons Convention (CWC) entered into force in 1997, twelve states have declared their intent to destroy existing chemical weapons production facilities.<sup>6</sup> Libya’s recent decision to dismantle its NBC programs under the International Atomic Energy Agency (IAEA) and the Organization for the Prohibition of Chemical Weapons (OPCW) represents a significant victory for the non-proliferation regimes. Pakistan has made moves toward dismantling the illicit trading network managed by nuclear scientist Dr. A.Q. Khan. Finally, though a few states have demonstrated tenacity in their pursuit of NBC in recent years, it should be recognized that these proliferation problems originate from before the end of the Cold War.

Nonetheless, a series of startling revelations have overshadowed these positive trends. After the 1991 Gulf War, the scope of Iraq’s NBC programs, as revealed primarily through the work of UNSCOM, caught many by

surprise. Similarly surprising was Russia’s 1992 announcement that it had developed an extensive biological weapons program.<sup>7</sup> Following that, in 1993, the DPRK forced the international community to rethink Pyongyang’s intentions after it expelled the IAEA inspectors assigned there and threatened to withdraw from the NPT. The recent discovery of Iran’s undeclared uranium enrichment program has also caught the international community off guard. Each of these revelations has rekindled debate on the effectiveness of current regimes to prevent or even detect proliferation. They have also raised questions about whether inducements and threats from the international community are sufficient to lure proliferating states out of the “downward spiral” of obduracy and estrangement.

In the post-Cold War world, the threat posed by NBC has become, arguably, more multidimensional and less predictable. Technological trends have made NBC more accessible to more actors. Ample time has passed for significant diffusion of nuclear technology and know-how. Advances in biological and chemical research have created new possibilities, potentially for malicious purposes. These technological advances present a problem for non-proliferation efforts because there is often no distinction between equipment and materials intended for peaceful purposes and those intended for weapons programs. At the same time, the treaty regimes actually promote peaceful use of such equipment and materials.

Thus, the combination of recent technological innovation, the technical challenges of clearly identifying proliferation problems, and the norms of technology promotion in the regimes create an environment of high uncertainty. Even if facts are known and verified, intentions are difficult to judge through technical measurements. A state appearing in full compliance with the NPT, for example, could very well be developing a “breakout” capacity.<sup>8</sup> Without evidence of non-compliance, the international community has few tools under current international law with which to respond to suspected proliferation. The dilemmas of dual-use technology also apply to the possibility of non-state actors gaining access to NBC materials and equipment.

<sup>5</sup> In 1963, for example, US President John F. Kennedy famously warned that within a decade fifteen to twenty-five states might obtain nuclear weapons. *The New York Times*, March 22, 1963, p. 4.

<sup>6</sup> “Declaring States Parties include Bosnia and Herzegovina, China, France, India, Iran, Japan, Libya, Russia, Serbia and Montenegro, United Kingdom, United States and another State Party.” Cited from the OPCW website, see website for more information at <<http://www.opcw.org/factsandfigures/>>.

<sup>7</sup> On Feb 1, 1992, President Yeltsin announced the end of Russia’s biological weapons research.

<sup>8</sup> Under the NPT state parties can develop all necessary components for a nuclear weapons program, including the stockpiling of fissile materials under the guise of compliance with treaty obligations, and then withdraw from the treaty to develop nuclear weapons.

## Proliferation threats: what has changed since 9/11?

Since the attacks on September 11, 2001, the threat of terrorism has achieved new significance, particularly in connection to the potential use of nuclear, biological, chemical, and radiological weapons (NBC+R). As with the state-based proliferation threats discussed above, however, recent trends suggest a mixed picture. Of course, the threat of terrorist use of NBC+R<sup>9</sup> predates the attacks on 9/11. Many experts took the 1995 Tokyo sarin gas attacks by Aum Shinrikyo to be a watershed event. Yet, between 1995 and 2002, over 2600 international terrorist attacks have been recorded, and there has been only one other significant attack involving NBC+R: the anthrax letter attacks in 2001, which resulted in 22 cases of anthrax-related infection leading to 5 deaths.<sup>10</sup> Thus, it remains to be proven that these are representative of a trend.

Technological and organizational factors are key constraints on the likelihood of NBC+R terrorism. Technologically, the development of a nuclear weapon remains extremely difficult for a terrorist group, and radiological, biological, and chemical weapons, though more easily developed, also face significant obstacles.<sup>11</sup> For example, investigations into Aum Shinrikyo's biological and chemical activities revealed that despite over \$1 billion in assets, extensive laboratories, and access to lab expertise, the organization failed to effectively weaponize anthrax and botulinum and achieved limited results with sarin gas. This implementation failure has been attributed to Aum's extremist organizational culture. The diffusion of terrorist organizations such as Al Qaeda into cells might also inhibit their ability to establish sophisticated scientific programs to develop NBC.

But a number of factors weigh against a blithe interpretation of the threat of terrorist use of NBC+R. The lethality of terrorist attacks has steadily increased in recent years, even as the gross number of attacks has declined.<sup>12</sup> Some analysts have seen this as part of a wave of a new type of terrorism, typified by Aum Shinrikyo and Al Qaeda, and



H.E. Mr. Kofi Annan

operating on a greater scale, both in terms of available resources and desired lethality of attacks.<sup>13</sup> In addition, the technological and organizational constraints discussed above are discounted by the possibility of theft, not to mention clandestine supply, of materials or components to develop NBC+R. Whereas a state would likely acquire NBC only for deterrence purposes, a terrorist group is more likely to acquire such weapons to use them. Threats from shadowy non-state actors undermine deterrence by denying a proper "return address" for the perpetrator of an attack. In addition, the likelihood that a terrorist would seek to obtain NBC to use them suggests that the lag time between acquisition and use is likely to be short.

### International response: *how* should the international community respond?

Amidst these threats, the international community faces serious problems in organizing collective responses. The international community remains consumed by a divisive debate on the respective advantages and disadvantages of unilateral versus multilateral responses. Difficulties in finding international consensus intensified after the

<sup>9</sup> NBC+R refers to nuclear, biological, chemical, and radiological weapons. See footnote 3.

<sup>10</sup> United States Department of State, *Patterns of Global Terrorism, 2002*. Washington, D.C.: US Dept of State, April 2003, p. 161.

<sup>11</sup> Jean Pascal Zanders, "Assessing the Risk of Chemical and Biological Weapons Proliferation to Terrorists," *The Nonproliferation Review*, Fall 1999, pp. 17-34. Jessica Stern, *The Ultimate Terrorist*. Cambridge, MA: Harvard University Press, 1999. Jonathan B. Tucker, *Toxic Terror: Assessing Terrorist Use of Chemical and Biological Weapons*. Cambridge, MA: MIT Press, 2000.

<sup>12</sup> According to the counts taken by the US Department of State, the rate of terrorist attacks dropped from about 400 per year in 1991-1996 to about 200 per year in 1997-2002, while the average level of casualties from such attacks rose from about 2200 per year in 1991-1996 to about 4800 per year in 1997-2002. See the US Department of State, *Patterns of Global Terrorism, 1996*, Washington, D.C.: US Dept of State, April 1997, Appendix C; and *Patterns of Global Terrorism, 2002*, Appendix H.

<sup>13</sup> Bruce Hoffman, *Inside Terrorism*. New York: Columbia University Press, 1998; Walter Laqueur, *The New Terrorism and the Arms of Mass Destruction*. Oxford, UK: Oxford University Press, 1999.

terrorist attacks on 9/11. The source of the discord appears to stem from divergent threat perceptions. Some perceive proliferation threats to be imminent and emanating from certain states. Other countries place emphasis on threats posed by the weapons themselves and consider the threats to be longer term. Consequently, the arguments for or against a particular approach to proliferation threats are driven by the nature of threat perception for individual states.

The debate has been intensified by recent trends. Following the end of the Cold War, the US and its allies put greater emphasis on so-called “ad hoc initiatives” or unilateral responses in order to address weaknesses or gaps in the multilateral regimes until these could be closed in the negotiations process. Examples include strengthening the Nuclear Suppliers Group and the Australia Group.<sup>14</sup> The US Congress established the Nunn-Lugar program in 1991, commonly known as Cooperative Threat Reduction (CTR), to reduce threats posed by poorly guarded NBC arsenals of the former Soviet Union.<sup>15</sup> These developments were balanced by important developments in the multilateral nonproliferation framework, such as the CWC, the indefinite extension of the NPT, the Comprehensive Test Ban Treaty (CTBT), and the IAEA Additional Protocol.

More recently, however, unilateral responses to proliferation threats have become even more prominent as *alternatives* to enhancing the multilateral framework. This has been due to the expressed need for early action and for treating proliferating states differently than states in good standing with treaty regimes. The US has formally retreated from a number of international nonproliferation instruments including the Anti-Ballistic Missile Treaty, the CTBT, and the Ad Hoc Group negotiations for the Biological Weapons Convention. After 9/11, there has been notable resistance by the US to engage in any multilateral negotiations. Instead, the terrorist attacks of 9/11 spurred a new generation of ad hoc initiatives, which include the Proliferation Security Initiative (PSI) and the G8 Global

Partnership.<sup>16</sup> In his speech in February 2004, US President George W. Bush made several proposals to close gaps in the multilateral regimes. But these proposals do not entail strengthening the treaty regimes through multilateral negotiations. In particular, he proposed that the Nuclear Suppliers Group use the Additional Protocol as a condition of supply and deny exports of uranium enrichment and spent fuel-reprocessing technology to states that do not already have a full-scale, operational program. Critics of these proposals argue that the proposed strengthening measures are external to the multilateral treaty regimes and do not entail deep and broad enough commitments to provide long-term solutions.

Amidst this intensified conflict between advocates and detractors of different approaches, sound interpretation of the benefits, drawbacks, and *complementarity* of “unilateral” and multilateral approaches is necessary. In the ongoing debate, the term “unilateral” is typically used to describe actions taken outside the legally-binding multilateral framework by a single state or group of states. Unilateral responses have some significant disadvantages. If not endorsed by a multilateral body, unilateral actions face legitimacy problems, especially if the action is found to be unnecessary or proves unsuccessful. The recurrence of unilateral responses can lead to erosion of the multilateral framework. Without institutionalization, unilateral responses may be less likely to provide lasting or stable solutions.<sup>17</sup> However, the flexible nature of unilateral responses offers several advantages for responding to proliferation problems. Unilateral responses can be tailored to specific situations. These initiatives usually involve a limited number of states and thus a more prompt decision-making process that is suitable for crisis situations.

Multilateral instruments face their own shortcomings. Multilateral institutions have a poor track record in responding to proliferation crises and have not proved to be “proactive” in addressing more urgent concerns. This has led to inconsistent enforcement of the treaty regimes

<sup>14</sup> The objectives of the Australia Groups are to “to ensure, through licensing measures on the export of certain chemicals, biological agents, and dual-use chemical and biological manufacturing facilities and equipment, that exports of these items from their countries do not contribute to the spread of CBW [chemical and biological weapons].” See <<http://www.australiagroup.net/en/agobj.htm>>.

<sup>15</sup> CTR activities are currently being expanded to include bilateral initiatives of other countries under the G8 Global Partnership established in 2002.

<sup>16</sup> The Proliferation Security Initiative (PSI) was announced by US President Bush in Krakow, Poland on May 31, 2003 as a multinational response to the threat of NBC proliferation. PSI consists of eleven core nations and additional participants and involves efforts to interdict maritime and air shipments suspected to contain NBC-related cargoes. See US State Department website for more information, <<http://www.state.gov/t/np/c10390.htm>>. The G8 Global Partnership was established at the G8 Kananaskis Summit in June 2002. The G8 countries pledged up to \$20 billion over the next ten years to reduce threats posed by NBC. Since then, several other countries have joined to pledge funds for threat reduction projects. See the website of the Government of Canada for more information, <<http://www.g8.gc.ca/2002Kananaskis/kananaskis/globpart-en.asp>>.

<sup>17</sup> For example, the Proliferation Security Initiative (PSI) is not an organization or a formal agreement, but rather an activity undertaken by a group of states. At any time, a state can decide to no longer implement the agreed activity without incurring any penalties from the international community.

and their underlying norms, usually undertaken by individual states or groups of states. In contrast to unilateral initiatives, multilateral instruments are typically developed over years of arduous negotiations, are aimed at preventing proliferation in the long-term, and are thus fairly rigid by nature. As weaknesses appear, multilateral institutions must undergo reform through negotiated strengthening measures. Nonetheless, many experts argue that multilateral responses are more time efficient in the long-run and generally prove more effective than dealing with each state on an individual basis. Multilateral responses, such as the treaty regimes, can instill a certain level of predictability into relations among states, a necessary component for cooperation on global problems. In addition, collective actions stemming from multilateral frameworks enjoy international legitimacy and result in greater burden-sharing.

This comparison of unilateral and multilateral responses demonstrates that neither approach is complete, and that each type of response has an essential and complementary role to play in addressing NBC proliferation. While multilateral instruments offer comprehensive policy frameworks to guide and regulate the actions of individual states in the long-term, they are not effective without individualized implementation at the national level. For example, the CWC and the BWC explicitly obligate states to adopt the necessary domestic legislation and measures in order to implement the obligations set forth in the respective convention.<sup>18</sup> The effectiveness of multilateral institutions depends on the resources and activities of member states, and coalitions may allow member states to optimize the use of these resources for nonproliferation activities. Thus it should be no surprise that parties to the NPT, CWC and BWC have typically implemented their treaty obligations using bilateral and plurilateral arrangements to supplement measures taken at the domestic level. A challenge for the international community involves reconciling the different roles of unilateral, bilateral, plurilateral and multilateral instruments to provide for a comprehensive response to proliferation threats. A first step in meeting that challenge is to

assess how well the current multilateral framework as a basis for effective nonproliferation action, whatever form that action may take.

### III. Evaluating the Multilateral Framework as a Basis for Action

The adequacy of the multilateral regimes for nuclear, chemical, and biological weapons and their delivery systems depends, *inter alia*, on the norms that they embody, the legal foundations that they provide, the instruments that they offer, and the commitments that they garner. There is a great deal of variation across the regimes in these attributes, owing to differences in their history and the specificities of the problems that they address. For example, whereas the CWC and the BWC are based on the norm of global prohibition of a class of weapons, the NPT imposes different obligations on nuclear-weapon states and non-nuclear-weapon states. There are also important similarities in the regimes, particularly in relation to three common objectives: (1) promotion of peaceful uses of technology, (2) non-proliferation, and (3) disarmament. Since the end of the Cold War, the tension among these objectives has intensified.<sup>19</sup> The following section examines the adequacy of the UN system and the multilateral treaties as a basis for nonproliferation action.

#### The role of the UN system

Since its inception, the United Nations has played an important role in devising solutions to the threats posed by nuclear, chemical, and biological weapons and their means of delivery. As the first substantive decision of the UN in 1946, the General Assembly (GA) adopted a resolution establishing the United Nations Atomic Energy Commission (UNAEC) as a subsidiary body of the UNSC.<sup>20</sup> This early decision by the GA underlined the authoritative role of the UNSC in addressing threats to international peace and security as envisioned by the UN Charter—including those posed by nuclear weapons.<sup>21</sup> In later

<sup>18</sup> The Chemical Weapons Convention and the Biological Weapons Convention are discussed in more detail below.

<sup>19</sup> This is partly due to lack of progress by the nuclear-weapon states on their disarmament commitments. However, further discord among states results from different conceptions of the three objectives and their interrelationship. Some states maintain the “traditional” relationship between disarmament, non-proliferation and peaceful uses, arguing that the three objectives are mutually reinforcing and must be pursued simultaneously. Other states highlight the inherent contradictions between the three objectives. Arguably, the nature of the relationship between these objectives—reinforcing or contradictory—depends on the institutional machinery designed to achieve them.

<sup>20</sup> See resolution 1 (I) “Establishment of a Commission to Deal with the Problem Raised by the Discovery of Atomic Energy” adopted by the General Assembly on 24 January 1946.

<sup>21</sup> However, nuclear weapons were not mentioned in the UN Charter as it was signed at San Francisco on 26 June 1945 just three weeks before the explosion of the first atomic bomb and entered into force on 24 October 1945 less than three months after the detonation of atomic bombs on Hiroshima and Nagasaki.

years, the transfer of some enforcement authority to the UNSC (through a referral process) by each of the treaty regimes further substantiated its authoritative function.

The UNSC charted new territory in its enforcement role by establishing UNSCOM in 1991 and UNMOVIC in 1999. Under UNSC resolutions, both UNSCOM and UNMOVIC were given the mandate to uncover and dismantle Iraq's NBC and ballistic missile programs— a mandate that was largely made possible by Iraq's defeat in the Gulf War. Despite attempts by the current US administration to discredit international inspections, it now appears that the efforts of UNSCOM and UNMOVIC were more successful than first thought.

However, throughout its history, the UNSC has not consistently and resolutely addressed proliferation threats. Rather, the UNSC has acted tentatively and on a case-by-case basis. Notably, the UNSC has yet to impose consequences on a proliferating state as a result of the referral processes of the treaty regimes.<sup>22</sup> The “selective enforcement” of the treaty regimes by the UNSC derives from disagreements between the veto-wielding Permanent Five (P-5).<sup>23</sup> Despite being referred to the UNSC by the IAEA in 1993, the DPRK did not face any consequences imposed on it by the UNSC due to disagreement between the P-5. In contrast, Iraq was not referred to the UNSC by the IAEA; rather it was forced to open its territory to UNSCOM as part of the post-Gulf War cease-fire agreements. UNSC resolution 1441 forced Iraq to reopen its territory for inspections by UNMOVIC in 2002. It remains to be seen whether the IAEA Board of Governors will refer Iran to the UNSC for its undeclared nuclear activities. The “selective enforcement” of treaty regimes by the UNSC has not only fuelled the debate on its irrelevance but also contributed to the weakening of the non-proliferation norms.

Without a referral by the treaty regimes, it is unclear whether the UNSC is “entitled” or has the capacity to address proliferation threats on a continuous basis for several reasons. In 1992, the UNSC President declared the proliferation of all weapons of mass destruction to be a threat to international peace and security. Nonetheless, not until Resolution 1540 has the UNSC been given a



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direct *mandate* to address NBC proliferation threats as they arise—either through a formal resolution declaring its authority to address the proliferation of NBC—or through specific recommendations made by the GA.<sup>24</sup> It remains to be seen whether Resolution 1540 will provide for a more proactive agenda.

In addition, without establishing its own inspections regime as it did for Iraq, it would be difficult, if not impossible, for the UNSC to act on suspected non-compliance with the treaty regimes. In order to enforce the treaty regimes or penalize proliferating states, the UNSC would need clear evidence of non-compliance. Third, the UNSC has typically been “reactive” rather than “proactive” in its responses. In order to play a more proactive role, the UNSC would need to systematically assess proliferation threats and develop criteria for determining the appropriate response. It is unclear whether the UNSC has the necessary capacity or whether it is the appropriate forum for such tasks in the first place. Finally, there is no basis in international law for enforcing nonproliferation norms on states outside of the treaty regimes.<sup>25</sup>

The UN has also played a crucial role in moving the disarmament process forward. It has served as a forum for the negotiation of new treaties and instruments and as the depositary organization for several treaties. The GA has

<sup>22</sup> The IAEA Board of Governors can refer cases of non-compliance with safeguards agreements to the UNSC; the OPCW Executive Council can refer cases of non-compliance with the CWC to the UNSC.

<sup>23</sup> Already in 1946, US Representative to UNAEC Bernard Baruch warned about the dangers of subjecting enforcement decisions on proliferation to the veto power of the P-5. See the Baruch Plan, presented on 14 June 1946 to the United Nations Atomic Energy Commission, <<http://www.nuclearfiles.org/redocuments/1946/460614-baruch.html>>.

<sup>24</sup> See the verbatim record of the UNSC meeting on 31 January 1992, S/PV.3046.

<sup>25</sup> UNSC Resolution 1540 criminalizes WMD proliferation to non-state actors and assigns the UNSC with a clear enforcement role on this issue. Nonetheless, it does little to provide guidelines for dealing with proliferation by states outside the treaties.

both generated proposals for future legal instruments and voted to adopt treaties negotiated in the Conference on Disarmament (CD).<sup>26</sup> The CD, though not considered a UN body in the typical sense, remains the sole multilateral negotiating forum on this issue since 1978.<sup>27</sup> The CD and its predecessors are credited with the negotiation of the NPT, BWC, CWC and the CTBT. Despite these achievements, there has been deadlock in the CD on its program of work since 1996.

### Assessing the multilateral treaty regimes

Both states and non-state actors have succeeded in exploiting various legal gaps in the non-proliferation regimes. Only on occasion, as with UNSC Resolution 1540, have these challenges elicited a formal response from the international community to enforce the non-proliferation norms and strengthen the regimes through multilateral negotiations. The legal gaps, combined with inaction by the UNSC, have resulted in the steady erosion of the norms underlying the treaty regimes. Today, fundamental weaknesses in each of these regimes not only continue to hamper consistent and resolute international responses to NBC proliferation, but they also are used as arguments against the need for strengthening the regimes. If this trend is allowed to continue, it may lead to the eventual unraveling of the regimes themselves.

The multilateral treaty regimes are increasingly criticized for failing to effectively address “new” threats such as terrorists gaining access to NBC. The most obvious shortcoming of multilateral disarmament treaties is that they are state-based, meaning they are designed to regulate, monitor, and verify the activities of states, not

those of non-state actors.<sup>28</sup> Terrorists do not consider themselves bound by international treaties or the norms established by them. However, the full and universal implementation of these agreements could entail wide-ranging measures that would address the threat of terrorists acquiring NBC.<sup>29</sup> UNSC Resolution 1540 attempts to address this gap, but it remains to be seen how its provisions will be operationalized.

To determine how the UN and its organs can play a more effective role in addressing proliferation threats, one must first assess the gaps in the multilateral treaty regimes and the nature of the role of the UN as foreseen in the treaty texts. The assessment of treaty regimes reveals several common weaknesses: implementation problems, inadequate verification mechanisms, lack of enforcement, and challenges to universality.

### Treaty on the Non-Proliferation of Nuclear Weapons (NPT)

Lacking an administrative body, the NPT must rely on its review conferences as the only forum for issues of treaty implementation and decision-making. The review conferences take place once every five years and are typically burdened by the pressure of reaching consensus on a final document.<sup>30</sup> As a result, the decision-making mechanism of the NPT tends to be mostly “reactive” in nature rather than forward-looking. Even then, the role of the review conference as a reactive body is hampered by procedures for decision-making.<sup>31</sup> Due to challenges in reaching consensus, many states are reluctant to consider controversial substantive issues such as the withdrawal of the DPRK from the NPT in 2003.<sup>32</sup>

<sup>26</sup> For example, the CTBT would have failed in the CD due to India’s veto. But it was transferred to the GA, where a vote of approval moved the treaty towards signature. See Patricia Lewis and Ramesh Thakur, “Arms control, disarmament and the United Nations,” *Disarmament Forum*, 2004, no. 1, pp. 17-28; specifically pp. 21-22.

<sup>27</sup> The CD was established in 1978 by the first Special Session on Disarmament of the General Assembly. The CD is considered an independent body and has its own rules and procedures. However, the budget of the CD is included in the regular budget of the UN. In addition, the Department for Disarmament Affairs of the UN Secretariat serves as the secretariat and conference support for the CD. For a discussion on the need to enhance its role, see Rakesh Sood, “The Conference on Disarmament Concludes Another Frustrating Year,” *Disarmament Diplomacy*, Issue No. 73, October-November 2003. <<http://www.acronym.org.uk/dd/dd73/73op04.htm>>

<sup>28</sup> Although not designed to address threats posed by non-state actors, the disarmament and nonproliferation regimes provide the only multilateral instruments and fora for dealing with threats related to NBC and terrorism. Accordingly, both the IAEA and the OPCW have responded to the threat of nuclear and chemical terrorist in their respective capacities. The IAEA developed a comprehensive plan to counter nuclear terrorism. The plan is described in a 12 August 2002 report by the IAEA Director General, GOV/INF/2002/11-GC(46)/14. The OPCW has established a working group on aspects related to terrorism. In addition, the OPCW is working closely with the Counter-Terrorism Committee (CTC) under the terms of UNSC Resolution 1373 and the Organization of American States (OAS) under the terms of the 2003 Mexico Declaration.

<sup>29</sup> These could include the criminalization of activities involving NBC materials for offensive purposes, regulations for the transfer of dual-use materials, material control, protection and accounting, safety standards and provision of emergency assistance.

<sup>30</sup> The rules of the NPT review conferences do not require agreement by consensus. See Rule 28 of section IV of the Rules of Procedure for the NPT, <<http://disarmament.un.org:8080/wmd/npt/nptrevrule.html>>.

<sup>31</sup> See Tanya Ogilvie-White and John Simpson, “The NPT and Its 2003 PrepCom Session: A Regime in Need of Intensive Care,” *The Nonproliferation Review*, Spring 2003. [<http://cns.miis.edu/pubs/npr/vol10/101/simpson.pdf>]

<sup>32</sup> States still disagree on whether the DPRK had a right to withdraw from the NPT since it was in non-compliance with its obligations under the

Similarly, the NPT text does not establish a verification mechanism nor prescribe procedures for the enforcement of all provisions in the treaty. Rather, Article III of the NPT requires state parties to conclude safeguards agreements with the IAEA and transfers the authority for the verification of such agreements to the IAEA. Though the NPT does not directly assign a role to the UNSC, the IAEA Statute allows the Board of Governors to refer cases of possible non-compliance with its safeguards agreements to the UNSC.<sup>33</sup> The safeguards system increases confidence that states are meeting their NPT obligations. However, state compliance with IAEA safeguards agreements is not analogous to compliance with obligations under the NPT.<sup>34</sup>

Until recently, the effectiveness of the safeguards system depended heavily on state declarations of nuclear activities, since the IAEA could not inspect beyond what was declared by member states. As a result, several states were able to appear in compliance with IAEA safeguards while engaging in clandestine nuclear activities that could lead to the development of nuclear weapons. At the same time, the NPT allows states to develop all the necessary components for a nuclear weapons program under the guise of peaceful use.<sup>35</sup> In many cases, there is no technical distinction between technology used for peaceful purposes and nuclear weapons programs. In other words, the only distinction between peaceful and offensive uses of certain technology is one of intent. The Additional Protocol expands the authority of the IAEA to inspect undeclared facilities if necessary and use more intrusive inspection tools. So far, however, only 55 states have signed and ratified the Additional Protocol.

Aside from several structural loopholes, the NPT regime also faces serious challenges to its legitimacy. Most notably, the grand bargain of the NPT—that non-nuclear-weapon states renounce nuclear weapons in exchange for access to peaceful uses of nuclear energy and eventual



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disarmament by nuclear-weapon states—has reached a critical juncture. Thus far, nuclear-weapon states have made little concrete progress in fulfilling their disarmament commitments under article VI of the NPT, despite the thirteen practical steps agreed at the NPT review conference in 2000. At the same time, recent proposals by President Bush to close various loopholes in the regime aim to impose further restrictions on non-nuclear-weapon states. The continued endorsement of double standards initially propagated by the NPT text and lack of commitment on the part of nuclear-weapon states to achieve disarmament may lead to an unraveling of the regime.

Despite renunciation of nuclear weapons by most states—mostly attributed to norms established by the nuclear non-proliferation regime—the NPT remains three “plus one” (DPRK, which has withdrawn) states away from achieving universality.<sup>36</sup> The undefined status of India, Pakistan and Israel—the three de facto nuclear-weapon states—poses a serious challenge to both closing loopholes in the treaty and maintaining the legitimacy of the

treaty. At the second session of the 2005 NPT Preparatory Commission, a consensus decision was reached to keep the name plate for the DPRK available with the chairman should it be required.

<sup>33</sup> Iraq’s non-compliance with IAEA safeguards was discovered after the Gulf War based on information from defectors and UNSCOM inspections. In other words, the enforcement of the NPT and IAEA safeguards was not a result of the referral process provided by the IAEA Statute. In 2002, UNSC resolution 1441 declared Iraq to be in non-compliance with SC resolutions and subjected the country to inspections by UNMOVIC, another ad hoc inspections regime established 1999 for the purpose of disarming Iraq. In the case of the DPRK, the US and Japan attempted to take up the matter within the Council in 1993, a move that was stymied by China’s insistence that the DPRK’s withdrawal from the NPT was legal and issues regarding its safeguards agreements should be addressed through the IAEA. After a referral to the UNSC by the IAEA Board of Governors, the Council failed to adopt a resolution imposing sanctions on the DPRK as China threatened to veto any punitive measures. In February 2003, IAEA again reported to the UNSC its inability to verify the non-diversion of nuclear material. This time, both China and Russia objected to the involvement of the UNSC in the DPRK issue. As a result, the UNSC has failed to address the violations of the DPRK of the NPT and its safeguards agreement.

<sup>34</sup> For example, the IAEA safeguards are not applied to technology that could be used for weaponization, i.e. the development of a nuclear device. In addition, while the safeguards system may be able to detect inconsistencies in state declarations, safeguards cannot prevent proliferation.

<sup>35</sup> The components include uranium enrichment and spent-fuel reprocessing technology, both of which allow for states to come within several months of developing nuclear weapons while being in compliance with the NPT.

<sup>36</sup> NPT States Parties disagree on whether the DPRK had the right to withdraw from the NPT while in non-compliance.

regime. Even with a strengthened nuclear regime, the nuclear arsenals of these states will continue to pose an uncontrolled risk to the international community. As long as the status of these states remains ambiguous, they may be unable to cooperate in ways that might already be possible. These states are not likely to be persuaded to join the NPT as non-nuclear-weapon states given their voiced opposition to the discriminatory nature of the treaty and the prevalent backdrop of regional security concerns. At the same time, granting any special status to these states within the nuclear regime could inadvertently ascribe value to the possession of a nuclear arsenal and thus further weaken the norm against nuclear weapons.

### Biological Weapons Convention (BWC)

Lacking both a verification system and treaty organization, the BWC constitutes “little more than a gentleman’s agreement”.<sup>37</sup> Since its entry-into-force, little has been achieved to strengthen the BWC despite the mounting specter of biological weapons and availability of biological materials and equipment.<sup>38</sup> While advances in biotechnology and genetic engineering increase exponentially, policy has failed to keep the pace. Even so, there is no shortage of proposals for strengthening the biological weapons regime. The current policy crisis can be characterized by a lack of agreement on the appropriate approach for addressing the threat of biological weapons. Some states maintain that the BWC protocol negotiations provide an adequate monitoring mechanism. Other states argue that the costs involved in the proposed monitoring mechanism not only exceeded the benefits, but would not have provided sufficient confidence that state parties were fulfilling their obligations under the BWC. Since the US rejection of the protocol in 2001, the negotiations process for strengthening the BWC has been reduced to a series of annual meetings on specific topics: two weeks on technical issues followed by one week on political aspects. This process will not broach many crucial elements for a biological regime such as the detection of covert biological programs, implementation of standards for biosafety and oversight of biotechnology, and genetic engineering research.

Despite its structural deficiencies, the BWC text does assign a role to the UNSC. In the case of suspected non-compliance, article VI authorizes the UNSC to conduct an investigation of suspected non-compliance at the request of a state party. The UNSC then presents the results of the investigation to the state parties of the convention. However, the article does not stipulate what the consequences may be when a state is found to be in non-compliance with its treaty obligations. In addition, resolution 42/37 of the GA in 1987 gave the UN Secretary-General the authority to carry out investigations on the suspected use of biological weapons.<sup>39</sup> Both of these mandates have yet to be sufficiently put to the test for biological weapons.<sup>40</sup>

Without any verification or monitoring regime, it will remain difficult to assess the level of compliance with the BWC. Many argue that the dual-use nature of requisite technologies, i.e. the lack of a technical distinction between materials used for peaceful and offensive purposes, make it impossible to devise an effective verification system without compromising sensitive commercial information. Efforts to control exports of biological materials and equipment are hampered by the lack of a borderline between legitimate and offensive uses; according to some estimates, in 80% of cases, a licensing authority cannot prove that there is no risk of diversion.<sup>41</sup> As a result, the decision to export remains essentially a political decision based on trust or distrust of a state or end-user.

### Chemical Weapons Convention (CWC)

Thus far, the CWC is the only disarmament treaty in force that has established an organization responsible for implementing all provisions of the treaty, developed its own restrictions on export of dual-use technology, and has a comprehensive verification regime. Unlike the NPT and the BWC, the architecture outlined in the CWC is sound and proposes a complete and effective regime. However, having entered into force in 1997, much implementation work remains to be accomplished and many components of the regime remain largely untested.

<sup>37</sup> See Michael Moodie and Amy Sands, “New Approaches to Compliance with Arms Control and Nonproliferation Agreements,” *The Nonproliferation Review*, Spring 2001, p. 4, <<http://cns.miis.edu/pubs/npr/vol08/81/intro81.pdf>>.

<sup>38</sup> Jonathan Tucker, “In the Shadow of Anthrax: Strengthening the Biological Disarmament Regime,” *The Nonproliferation Review*, Spring 2002, p. 112. <<http://cns.miis.edu/pubs/npr/vol09/91/91tuck.pdf>>.

<sup>39</sup> The use of biological weapons would be considered a violation of the Geneva Protocol adopted in 1925. The BWC does not specifically prohibit use, however, it refers to the Geneva Protocol in article VIII.

<sup>40</sup> So far, there have been four field investigations initiated by the UN Secretary-General, all of which have involved alleged chemical or toxin weapons use. See for further discussion, Jonathan B. Tucker and Raymond A. Zilinskas, “Assessing US Proposals to Strengthen the Biological Weapons Convention”, *Arms Control Today*, April 2002, <[http://www.armscontrol.org/act/2002\\_04/tuczilapril02.asp?print](http://www.armscontrol.org/act/2002_04/tuczilapril02.asp?print)>.

<sup>41</sup> This point was raised by a former licensing board official at the IPA-Government of New Zealand conference.



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The implementation phase has revealed several challenges: much progress needs to be made in achieving universality, reporting of dual-use exports and imports, and ensuring effective verification and enforcement. Despite a rapid rate of increasing membership, many countries of concern remain outside of the regime.<sup>42</sup> The ban on chemical weapons undergirding the CWC has yet to be fully implemented. Only 12% of global chemical weapons stockpiles have been destroyed. The scope of the controlled chemicals under CWC must be continuously evaluated as science progresses to ensure that new toxic agents are subject to verification and other restrictions under the convention.

In the coming years, verification and enforcement present the most significant challenges to the chemical weapons regime. Under the CWC, state parties exporting and importing controlled chemicals are required to report these transfers to the OPCW, which then compares the figures to verify compliance with this rule. So far, the OPCW has identified many discrepancies between the figures for dual-use transfers reported by exporters and importers, indicating a need for more effective and harmonized reporting procedures. Thousands of chemical facilities still need to undergo their first inspections, which would require more resources to be made available to the OPCW.

Unlike the BWC and NPT, the CWC contains extensive procedures for investigating suspected cases of non-compliance. Under article IX, a state party may request the Executive Council to clarify any situation that is

either ambiguous or gives rise to concern about possible non-compliance. If the requested clarification is deemed inadequate by the requesting state, further clarification may be sought through the Executive Council or by requesting a challenge inspection of the facilities in question. Thus far, no state party has requested a challenge inspection or clarification from the Executive Council. The failure to use these tools could increase the political costs associated with such requests. In addition, the Executive Council of the OPCW has yet to refer a case of possible non-compliance to the UNSC as provided for in article XII of the CWC. The use of these instruments in appropriate circumstances will be crucial to the long-term effectiveness of the chemical regime.

#### IV. Improving the Capacity for Effective Institutional Responses

As discussed above, unilateral responses, multilateral responses, and all those in between should not be considered rivals. All types of responses are necessary for a comprehensive approach to proliferation threats. In order to make this ideal a reality, unifying concepts are needed to reconcile different approaches to proliferation threats and facilitate comprehensive solutions.

Much of the terminology inherited from the Cold War is no longer applicable for guiding responses to proliferation threats. The strategic notion of “mutually assured destruction” (MAD), also questioned during the Cold War, is at odds with the goals of disarmament and non-proliferation and has been explicitly rejected in the US’s June 2002 withdrawal from the 1972 Anti-Ballistic Missile Treaty. Traditional conceptions of deterrence do not apply to threats posed by non-state actors. Even the term “collective security” is reminiscent of the Cold War, describing the need for providing joint security against individual *state-based* threats.

The notable shift to “unilateral” responses can be seen as part of the search for unifying concepts and new principles in a post-Cold War era. “Unilateralists” argue that such actions will foster the development of new international rules, in the way that case law provides a basis for more widely applicable legal norms in a domestic context. “Multilateralists”, on the other hand, assert that without first developing a set of international rules, responses to proliferation threats will be selective and motivated by the political interests of a single state or a like-minded

<sup>42</sup> As of 30 April 2004, 162 countries will be States Parties to the Chemical Weapons Convention. Key states that have not yet ratified or acceded to the CWC include Egypt, Iraq, Israel, the DPRK and Syria.

group of states, while other threats will go ignored. The unilateralist argument assumes that there will be identifiable commonalities among the different cases of proliferation. But this has not been the case with Iraq, the DPRK, Libya, and Iran. Given the gravity of recent proliferation threats, the need for new international principles and concepts is pressing and requires immediate consideration.

Scholars and policy-makers have forwarded two relatively new strategic concepts to fill this post-Cold War conceptual void. One is the concept of “cooperative threat reduction” (CTR), originating from the Nunn-Lugar Program in 1991. CTR has the potential not only to bridge the gap between unilateral and multilateral actions but also to ease the tension between the goals of disarmament and non-proliferation.<sup>43</sup> The concept of CTR has already expanded beyond its initial bilateral activities between the US and Russia. Under the G8 Global Partnership, eleven states plus the European Union have funded CTR-type activities in the former Soviet Union.<sup>44</sup> CTR involves activities that are directed at the dismantlement of weapons systems but also the securing of NBC materials. In this way, these activities represent a crucial aspect of implementation for multilateral disarmament treaties and reduce the risk of proliferation at the same time.

The second is the concept of “universal compliance”, which shifts emphasis away from the goal of universal membership in treaty regimes to universal compliance with the terms of these regimes.<sup>45</sup> This emphasis on compliance shifts the normative basis of nonproliferation regimes from “equal treatment” and “sovereign equality” (corollaries to the goal of universal membership) to legitimate discrimination against those who do not live up to commitments. The values established by the UN Charter and the treaty regimes are solidly based on “equal treatment” and “sovereign equality”. However, recent cases of proliferation illustrate a growing need to treat states in good standing differently from those that violate treaties or are suspected of proliferation activity. Universal compliance attempts to get past sovereignty issues by emphasizing that all states should live up to the commitments that they have taken on by entering the regimes.

<sup>43</sup> For further discussion, see Michael Krepon, “Prisms and Paradigms”, *The Nonproliferation Review*, Spring 2002, pp. 122-131.

<sup>44</sup> See the website of the “Spreading the Global Partnership” project managed by the Center for Strategic and International Studies at <<http://www.sgpproject.org/publications/gpmonitor1.html#scorecard>>.

<sup>45</sup> See for further discussion, Jessica Tuchman Mathews, “What happened in Iraq? The Success Story of United Nations Inspections”, keynote speech delivered at the Conference on Weapons of Mass Destruction and the United Nations sponsored by the International Peace Academy and the Government of New Zealand, New York, March 5, 2004, <<http://www.ceip.org/files/Publications/JTM-Speech-UNWMD.asp?from=pubauthor>>.

<sup>46</sup> The IAEA verifies compliance with safeguards agreements required by Article III of the NPT. The IAEA does not have the mandate to verify compliance with all provisions of the NPT.

## V. Strengthening the multilateral framework: what needs to be done?

Multilateral capacity for responding to proliferation threats can be improved by: (1) strengthening the treaty regimes; (2) enhancing the role of the United Nations; and (3) creating new institutions. In the short-term, the treaty regimes can be strengthened through national implementation. The role of the treaty regimes in addressing threats posed by non-state actors would be substantially improved through the full implementation of the multilateral treaties. Full implementation would ideally include legislation and measures on criminalization, material protection, control and accounting, and regulation of dual-use transfers. In particular, the OPCW and its member states have placed greater emphasis on national implementation of the CWC as a way to address proliferation threats. In this regard, the NPT and the BWC are at a disadvantage since both treaties contain vague instructions on implementation and lack an organization responsible for implementing the provisions of the respective treaties.

The treaty regimes can be strengthened for the long-term through multilateral negotiations. Strengthening measures for the regimes should include improvements to treaty structures, stricter rules and concrete provisions for security of NBC materials. As discussed above in this report, the most significant gaps in the treaty regimes exist in the verification and enforcement mechanisms for the BWC and the NPT. To be an effective instrument, the BWC requires a verification and inspections regime. The NPT lacks a decision-making body that meets on a frequent basis. An Executive Council could be established for the NPT to monitor implementation and serve as a link between the NPT and the UNSC on enforcement issues. In the longer run, the NPT needs a mechanism for verifying compliance and enforcing all of its provisions.<sup>46</sup> All of these regimes need to be linked more explicitly to the provisions for export control, national legislation, and Committee oversight outlined by UNSC Resolution 1540.



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The treaty regimes could also be strengthened by adopting stricter rules. The NPT could be strengthened initially by making the Additional Protocol mandatory for all state parties. Furthermore, the Additional Protocol could be used as a condition for supply of sensitive materials in the NSG and could be expanded, for example, to empower inspectors to board ships. This approach could serve as a multilateral framework for activities like the PSI. In addition, the NPT exit clause could be removed and withdrawal from the NPT could be treated as a threat to peace and security by the UNSC.<sup>47</sup> The IAEA could be strengthened, for example, by drawing on lessons of the World Trade Organization's rules for filing of complaints and inquiries. Stricter verification and enforcement measures could also be implemented within the IAEA. The IAEA could adopt a rule that prohibits a state from receiving foreign assistance for nuclear activities if the IAEA cannot certify to be in full compliance with its transparency and safeguards obligations under the NPT. This could be facilitated by the establishment of a committee on safeguards and verification under the IAEA Board of Governors. In addition, the Board of Governors could be empowered to impose stricter enforcement measures. For example, if a state fails to declare facility under verification regime, it should be made to suspend operations and dismantle the facility.

Finally, enhancing provisions for the security of NBC materials would contribute to stronger treaty regimes.

<sup>47</sup> Most experts agree that amending the NPT would be next to impossible. Article VIII of the NPT outlines the amendment procedure for the Treaty. The amendment process for the NPT is fairly complex compared to other treaties. An amendment requires a majority of the votes of all the Parties to the Treaty, including the votes of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. Currently, India and Pakistan are members of the Board of Governors, both of which are not state parties to the NPT.

Improved biosecurity measures would go a long way to addressing proliferation threats posed by non-state actors. Efforts on biological security should be linked to create a web of institutions concerned with bioterrorism, biosafety, disease surveillance, and public health and emergency response. In the nuclear field, the increasing availability of uranium enrichment and reprocessing technology raises the risk of proliferation. The export of uranium enrichment and spent fuel reprocessing technology could be limited to states with full-scale programs. Alternatively, enrichment and reprocessing facilities could be placed under multinational control. The security of highly enriched uranium and plutonium stockpiles worldwide should be made a priority in the prevention of nuclear theft and smuggling. To this end, spent fuel management and disposal could be placed under multinational control. In addition, the nuclear industry could develop nuclear energy systems that avoid weapons-usable materials.

Besides strengthening the treaty regimes themselves, the international capacity for responding to proliferation threats could be improved significantly by enhancing the role of the United Nations, in particular the UNSC. The UNSC remains the only world body empowered to deal with immediate threats to peace and security and serves as a backstop for the treaty regimes. Resolution 1540 has given the UNSC a clear, if imprecise, mandate to respond to NBC proliferation threats. However, due to its composition and decision-making rules, the extent to which the UNSC is entitled to legislate in this manner is unclear.

The establishment of a permanent inspections regime under the UN represents another proposal that would simultaneously strengthen the role of the UN and address key loopholes in the regimes for biological weapons and ballistic missiles. The transition from UNSCOM to UNMOVIC should be evaluated with an eye toward establishing permanent inspection capacities as an asset to the Secretary-General or the UNSC. Recent findings in Iraq suggest that UN inspections may have been far more successful than had previously been thought. The inspectorate would build on the experiences of UNSCOM and UNMOVIC, preserve the inspections expertise on biological weapons and ballistic missiles, and maintain the partnership with existing agencies such as the IAEA and the OPCW. The strategic



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placement of a standing inspections regime under the Department for Disarmament Affairs (DDA) in the UN Secretariat could have the potential to link the preventive approach of the treaty regimes, which are currently serviced by DDA, to a more proactive crisis response mechanism. Alternatively, an inspections agency could be placed under the UNSC. But besides the shortcomings of the UNSC discussed in section III of this report, this would have several disadvantages. The inspections regime would be subject to the lack of transparency and accountability of the UNSC, and the competing interests of the P-5. Further, its establishment would be likely viewed as temporary and its emphasis would be limited to crisis response rather than a comprehensive preventive approach.

The role of other UN bodies for addressing proliferation threats could be strengthened as well. The Disarmament Commission (UNDC) could be revived as a commission on NBC. Currently, the UNDC is the sole multilateral body that deliberates on disarmament. It could serve as a forum for debate on a broader range of issues. The UNDC has been under-utilized in the past, and agreement has been elusive. Unless the UNDC can be given a new and credible role, it should probably be dissolved. Addressing the threat of NBC terrorism within the UN system should not be left to the Counter-Terrorism Committee (CTC). Rather, the work of the CTC should be broad-based to prevent overloading the UNSC with new tasks. This could be done by establishing a functional commission under the Economic and Social Council (ECOSOC). Alternatively, the UNSC

could create a Special Rapporteur on Non-Proliferation, who would report on trends and developments.<sup>48</sup>

Acknowledging difficulties in generating the requisite political will, a long-term option for improving multilateral capacity would be to create new institutions and innovative approaches. In particular, there is widespread support for the negotiation of a fissile material cut-off treaty (FMCT) in the Conference on Disarmament. This would provide the longer-term basis for control over sensitive fissile materials to succeed current ad hoc measures. Less can be said for other areas in need of new institutions. Under the current regimes, the possession and possible use of nuclear weapons and ballistic missiles remain “acceptable” for certain states. So far, only biological and chemical weapons have been prohibited as entire classes of weapons. Given the discriminatory nature of the NPT and lack of teeth in its provisions for disarmament, it may be necessary to negotiate a convention on nuclear weapons, which would prohibit the use and possession of nuclear weapons similar to the prohibitions found in the BWC and CWC. In addition to the collective restraints placed on missile proliferation by the Missile Technology Control Regime and the Hague Code of Conduct, a corresponding disarmament regime could be considered. Finally, current ad hoc initiatives like the Proliferation Security Initiative and the G8 Global Partnership could be expanded to be more inclusive. In the long-run, however, these initiatives should be complemented with efforts to strengthen the multilateral regimes.

The private sector and industry should be addressed explicitly using innovative approaches. The involvement of industry is essential for successful implementation, particularly with respect to dual-use technology. Inspections of industrial facilities are burdensome, and there is a risk of leaking proprietary information. The international community should actively engage industry to reach agreement on codes of conduct and frameworks for cooperation. At the same time, industrial interests and commercial competition should not be allowed to undermine nonproliferation goals. States will seek to develop their nuclear, chemical, and biological industries if it is in their comparative advantage to do so. Institutional responses to such industrial interests should seek to establish a level playing field for commercial competition. This will minimize the possibility that commercial interests will interfere with NBC nonproliferation efforts.

<sup>48</sup> In 1995, an international panel chaired by former US National Security Advisor McGeorge Bundy recommended the creation of a Special Rapporteur for Non-Proliferation under the UNSC.

## VI. Conclusion: Implications for Collective Action

This report has provided an overview of threats, institutions, and potential responses associated with NBC, particularly in relation to the UN. The overview suggests a number of implications for collective action.

- Responses to NBC threats require a balanced approach between holism and distinctiveness. Holistically, NBC proliferation is linked in association to regional conflicts, power asymmetries, prestige accorded to such weapons, and clandestine networks that facilitate the movement of components, materials, and funds. Distinctively, each class of weapons demands a different response on the basis of their variation in technical aspects, ease of acquisition and development, and their potential to cause mass destruction.
- Past cases of proliferation demonstrate that the international community's ability to respond collectively to such cases often depends more on threat perceptions than on verifiable facts of non-compliance. Threat perceptions vary from state to state and are the basis of the insecurities that may produce unintended outcomes. The international community has made concerted efforts to use inducements and threats to lure suspected proliferators away from developing NBC. But such efforts have a mixed record in preventing suspected proliferators from falling into a "downward spiral" of obduracy and estrangement.
- Some states have reversed their proliferation activities while others continue to proliferate. These positive and negative trends in state proliferation suggest that states pursue or "demand" NBC for various reasons, including regional security concerns, prestige, and global asymmetries. Reducing the demand for NBC will require the resolution of underlying security issues for proliferating states. In other words, any future collective action must examine and address the demand-side of proliferation.
- The rejection of NBC by some states and the pursuit thereof by others also indicates that non-proliferation efforts should be tailored to some degree. The principle of sovereign equality makes it difficult to treat states suspected of proliferation differently than states in good standing with their treaty obligations. This challenge is intensified by the lack of technical distinctions between many peaceful and offensive uses of dual-use technology. Also, policies have different effects on different states and their leaderships.
- The focus on the "newness" of threats can sometimes be misleading. Many negative trends in proliferation predate both 9/11 and even the end of the Cold War, and a number of positive trends can be identified over recent years. Nonetheless, key technological trends do present new degrees of accessibility of materials that may be used for NBC. Also, terrorism on a grander scale, in terms of resources and desired lethality, represents a recent trend amplifying the threat of terrorists using NBC+R.
- The threat of terrorists gaining access to NBC is inextricably linked to state possession of such weapons. Addressing NBC+R terrorism begins with developing state capabilities to control and account for their arsenals and their dual-use material and equipment. Other measures, such as enhancing the awareness and vigilance of the private sector, should be seen as complements to enhancing state capabilities. The treaty regimes can play a significant role in addressing the proliferation threats posed by non-state actors. Treaty regimes provide comprehensive frameworks for national measures and legislation that address among other things the safety and security aspects of NBC. In other words, the full implementation of the treaty regimes would be an essential component for addressing the threat of non-state actors gaining access to NBC and their materials. An immediate step towards strengthening the multilateral treaties could entail a renewed impetus on full implementation of treaty obligations.
- The enforcement of the treaty regimes is critical for their lasting legitimacy. As the UNSC represents the only world body empowered to address threats to international peace and security, the strengthening of its role in the enforcement of the treaty regimes would address key gaps in the multilateral framework. The "enforceability" of the treaty regimes depends on the effectiveness of the respective verification mechanisms, and the effectiveness of verification mechanisms, in turn, is firmly linked to the amount of state sovereignty ceded to the international inspections agency. Given the recent proliferation cases, the balance between intrusive verification and protection of state sovereignty may need to be reconsidered.

- Any progress in addressing the gaps in the nuclear regime will be difficult, if not impossible, without dealing with the cases of the DPRK and the three “de facto” nuclear-weapon states. The option to withdraw from the NPT without consequences or being forced to return benefits acquired under the treaty casts doubt on the credibility of the regime. The undefined status of India, Pakistan and Israel may prevent these states from cooperating as much as they may be willing. At the same time, assigning these states a special status may further jeopardize the legitimacy of the regime.
- In order to make progress on Article VI (disarmament) of the NPT, the debate should be shifted away from “haves versus have nots”, holding all parties to task. This would also allow for engagement of the de facto nuclear weapons states. Timetables for disarmament should be reaffirmed. A first step, as suggested by the steps agreed at the NPT Review Conference in 2000, would be the ratification of the CTBT by all nuclear-weapon states. In addition, efforts should be made to reduce incentives to acquire nuclear weapons and nuclear technology. In many cases, they are not security enhancers; this should be exposed.
- For collective action, there needs to be a legal standard for responding to states under suspicion of proliferation activities. Any differential treatment of states on a multilateral basis would require the development of new international standards, rules and mechanisms to avoid the politicization of proliferation threats. New types of collective action on proliferation threats will require new definitions. For example, the UNSC would require a set of criteria for evaluating the legitimacy of early action. How does one define a proliferation threat? How would the UNSC gather evidence that is not provided through the inspections agencies (OPCW and IAEA)? The multilateral capacity for collective action could be improved by the development of an intelligence-sharing mechanism for exchanging information related to proliferation threats.
- In order to provide comprehensive solutions to proliferation threats, the debate needs to move beyond ideological attitudes towards particular types of institutional responses. Unilateral actions and initiatives are often responses to gaps in the multilateral regimes.<sup>49</sup> Unilateral, bilateral, plurilateral and multilateral initiatives are not rivals and can work in consort to prevent proliferation. All types of initiatives are necessary for developing a multi-layered and multi-tiered system against proliferation threats.

<sup>49</sup> For example, export control regimes constitute a response by groups of states to the dual-use dilemma and the lack of technical distinction between technology used for peaceful or offensive purposes. This dilemma leads states to base export decisions solely on trust in the importing state or end-user. To ensure that free-market competition does not interfere with preventing proliferation and fulfill nonproliferation commitments under the treaty regimes, suppliers have formed export control groups to harmonize legislation on the licensing of exports.

## Annex 1: List of Acronyms

BWC	Biological Weapons Convention
CD	Conference on Disarmament
CTR	Cooperative Threat Reduction
CTBT	Comprehensive Test Ban Treaty
CWC	Chemical Weapons Convention
DPRK	Democratic People's Republic of Korea
GA	General Assembly
IAEA	International Atomic Energy Agency
MAD	Mutually Assured Destruction
NBC	Nuclear, biological, and chemical weapons
NBC+R	Nuclear, biological, chemical, and radiological weapons
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
OPCW	Organization for the Prohibition of Chemical Weapons
P-5	Permanent Five (members of the UNSC)
PSI	Proliferation Security Initiative
UN	United Nations
UNAEC	United Nations Atomic Energy Commission
UNSC	United Nations Security Council
UNSCOM	United Nations Special Commission
UNMOVIC	United Nations Monitoring, Verification and Inspection Commission

## Annex 2: Conference Agenda

Friday, 5 March 2004

- 0900-930 Opening Remarks by **The Hon. Marian Hobbs**, Minister for Disarmament and Arms Control, Government of New Zealand
- 0930-1100 **PANEL I – THE NATURE OF THE THREAT**
- What is the nature of the present threat posed by WMD? How has this threat changed in both reality and perception since the end of the cold war, and since the 2003 conflict in Iraq? What are the advantages and disadvantages of multilateral and unilateral measures in response to such threats? What is the relationship between disarmament and non-proliferation?
- Chair: **David M. Malone**, President, International Peace Academy
- Speakers: **H.E. Mr. John S. Wolf**, Assistant Secretary of State for Non-proliferation, U.S. Department of State  
**H.E. Mr. Henrik Salander**, Ambassador, Secretary-General of the Weapons of Mass Destruction Commission  
**Mr. Nobuyasu Abe**, Under-Secretary-General for Disarmament Affairs, United Nations
- Discussant: **Mr. Michael Krepon**, Founding President, The Henry L. Stimson Center
- 1100-1110 Remarks by **H.E. Mr. Kofi Annan**, Secretary-General, United Nations
- 1130-1300 **PANEL II – TREATY REGIMES AND VERIFICATION**
- Are the treaty regimes for nuclear, biological, and chemical weapons adequate? What about delivery systems, notably missiles? Should there be one rule for all, or should responsibility be divided by military capacity, or on a regional basis? Can the monitoring and the verification of treaty commitments be improved and when should intelligence from outside states be used to determine the breach of an obligation?
- Chair: **H.E. Mr. Don MacKay**, Permanent Representative of New Zealand to the United Nations
- Speakers: **Dr. Gary Samore**, Director of Studies and Senior Fellow for Non-Proliferation, International Institute for Strategic Studies  
**Dr. Amy Smithson**, Senior Fellow, Center for Strategic and International Studies  
**Mr. Huang Yu**, Director of External Relations, Organisation for the Prohibition of Chemical Weapons
- Discussant: **Prof. John Simpson**, Director, Mountbatten Centre for International Studies
- 1300 – 1400 Lunch Keynote Address by **Ms. Jessica Tuchman Mathews**, President, Carnegie Endowment for International Peace

1400-1530 PANEL III – TERRORISM AND WMD

How can the UN respond to the unique danger of terrorists using WMD? What criteria would need to be fulfilled for the Security Council to authorise a preemptive or preventive use of force to address certain types of threats – for instance, terrorist groups armed with weapons of mass destruction?

Chair: **H.E. Mr. Sergey V. Lavrov**, Permanent Representative of the Russian Federation to the United Nations

Speakers: **H.E. Mr. Munir Akram**, Permanent Representative of Pakistan to the United Nations  
**Ambassador Michael Sheehan**, Deputy Commissioner of Counter-Terrorism, New York Police Department, and former Assistant-Secretary-General, at United Nations Department of Peacekeeping Operations  
**Dr. Christopher Chyba**, Co-Director, Center for International Security and Cooperation, Stanford University

Discussant: **Dr. Waheguru Pal Singh Sidhu**, Senior Associate, International Peace Academy

1600-1730 PANEL IV – INSTITUTIONAL RESPONSES

What is the role of the Security Council, in contrast to the treaty bodies monitoring nuclear, biological, and chemical weapons? Is there a need for new institutions?

Chair: **H.E. Sir Emyr Jones Parry**, KCMG, Permanent Representative of the United Kingdom to the United Nations

Speakers: **Mr. Jayantha Dhanapala**, Member of the International Commission on Weapons of Mass Destruction, former Under-Secretary for Disarmament Affairs, United Nations  
**Mr. Gustavo Zlauvinen**, Representative of the Director General to the United Nations, International Atomic Energy Agency  
**Ms. Rebecca Johnson**, Executive Director, The Acronym Institute for Disarmament Diplomacy

Discussant: **Mr. Henry D. Sokolski**, President, Nonproliferation Policy Education Center

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