

UPDATING OUR STRATEGY FOR COMBATING WEAPONS OF MASS DESTRUCTION

BY

COLONEL PATRICK R. TERRELL
United States Army

DISTRIBUTION STATEMENT A:

Approved for Public Release.
Distribution is Unlimited.

USAWC CLASS OF 2009

This SRP is submitted in partial fulfillment of the requirements of the Master of Strategic Studies Degree. The views expressed in this student academic research paper are those of the author and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.



U.S. Army War College, Carlisle Barracks, PA 17013-5050

The U.S. Army War College is accredited by the Commission on Higher Education of the Middle State Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104, (215) 662-5606. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 01-03-2009		2. REPORT TYPE Strategy Research Project		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE Updating Our Strategy for Combating Weapons of Mass Destruction				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Colonel Patrick R. Terrell				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Dr. Douglas Johnson Strategic Studies Institute				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army War College 122 Forbes Avenue Carlisle, PA 17013				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution A: Unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT In 2002, the National Security Council recognized the change in our greatest threat to the nation and prepared the first comprehensive strategy to limit the dangers posed by Weapons of Mass Destruction. This strategy provides a comprehensive approach relying heavily on both diplomacy and military strength. It leverages means already available to our nation while adding several critical new aspects. Nearly four years later the Joint Staff published a National Military Strategy to Combat Weapons of Mass Destruction. Like the National Strategy it relied on means already in existence or in development and lessons learned during the interim period. To date the US State Department had worked to advance efforts such as Proliferation Security Initiative. However, it is unclear that actions across all elements of national power are synchronized or inclusive of the entire interagency with regard to Combating Weapons of Mass Destruction. Now seven years into the strategy it is time to review the strategy identify what is working well, and what aspects require updating, such as possibly a framework for national level synchronization.					
15. SUBJECT TERMS WMD, Chemical, Biological, Nuclear					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UNLIMITED	18. NUMBER OF PAGES 26	19a. NAME OF RESPONSIBLE PERSON
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED	c. THIS PAGE UNCLASSIFIED			19b. TELEPHONE NUMBER (include area code)

USAWC PROGRAM RESEARCH PROJECT

**UPDATING OUR STRATEGY FOR COMBATING WEAPONS OF MASS
DESTRUCTION**

by

Colonel Patrick R. Terrell
United States Army

Dr. Douglas Johnson
Project Advisor

This SRP is submitted in partial fulfillment of the requirements of the Master of Strategic Studies Degree. The U.S. Army War College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104, (215) 662-5606. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

The views expressed in this student academic research paper are those of the author and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.

U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

ABSTRACT

AUTHOR: Colonel Patrick R. Terrell

TITLE: Updating Our Strategy for Combating Weapons of Mass Destruction

FORMAT: Strategic Research Project

DATE: 1 March 2009 WORD COUNT: 5,053 PAGES: 26

KEY TERMS: WMD, Chemical, Biological, Nuclear

CLASSIFICATION: Unclassified

In 2002, the National Security Council recognized the change in our greatest threat to the nation and prepared the first comprehensive strategy to limit the dangers posed by Weapons of Mass Destruction. This strategy provides a comprehensive approach relying heavily on both diplomacy and military strength. It leverages means already available to our nation while adding several critical new aspects. Nearly four years later the Joint Staff published a National Military Strategy to Combat Weapons of Mass Destruction. Like the National Strategy it relied on means already in existence or in development and lessons learned during the interim period. To date the US State Department had worked to advance efforts such as Proliferation Security Initiative. However, it is unclear that actions across all elements of national power are synchronized or inclusive of the entire interagency with regard to Combating Weapons of Mass Destruction. Now seven years into the strategy it is time to review the strategy identify what is working well, and what aspects require updating, such as possibly a framework for national level synchronization.

UPDATING OUR STRATEGY FOR COMBATING WEAPONS OF MASS DESTRUCTION

. . . we must prevent the terrorists and regimes who seek chemical, biological or nuclear weapons from threatening the United States . . .

—George W. Bush¹

While the hazards associated with nuclear, biological, and chemical warfare are nothing new, the idea that someone other than a national military could possess them and use them against an unprotected U.S. population is frightfully new. The fact that this threat exists should not shock the United States as it has been building up for nearly two decades. In the 1990's, the world witnessed Saddam Hussein use chemical munitions against Kurd civilians and the Aum Shinrikyo cult use of sarin gas on a subway in Tokyo. In this decade, we have seen a domestic terrorist mail anthrax filled letters to the Hart Senate Building and we have heard several declarations from Osama bin Laden that he desires to possess Weapons of Mass Destruction. Fortunately, the United States Government has not taken a wait and see approach to this threat. As early as 1992, the U.S. Congress began the first efforts at controlling Weapons of Mass Destruction with the passing of the "Nunn-Lugar" Cooperative Threat Reduction Act. The law's objective was to "Facilitate, on a priority basis, the transportation, storage, safeguarding, and elimination of nuclear and other weapons of the independent states of the former Soviet Union."² By doing so, the United States initiated preventive steps to halt the proliferation of nuclear material, chemical, and biological agents out of the former Soviet Union before it began. The next major action came with the June 1995 Presidential Decision Directive 39, U.S. Policy on Counterterrorism.³ This is the first policy that announced links between nuclear, chemical, and biological weapons threats

and terrorists. Finally, following the international terrorist attack on September 11, 2001 and anthrax laced letters sent to the federal government and media in the following weeks, the United States prepared its National Strategy to Combat Weapons of Mass Destruction. The stated objective of this strategy is to,

. . . not permit the world's most dangerous regimes and terrorists to threaten us with the world's most destructive weapons. We must accord the highest priority to the protection of the United States, our forces, and our friends and allies from the existing and growing WMD threat.⁴

By establishing such a broad aim, the president afforded the government maximum flexibility in devising a strategy to meet this vital national interest. The remainder of this paper will analyze this strategy in light of six years of changing conditions and lessons learned. Based on this analysis, recommendations will be offered to update the strategy for the future threat environment.

Strategic Framework

Unlike the military's previous defensive responsive mindset towards chemical, biological, or nuclear war the National Strategy to Combat Weapons of Mass Destruction is based on a proactive philosophy. A philosophy that is built around the construct of keeping our adversaries from acquiring Weapons of Mass Destruction and then if they do acquire the capability demonstrating that there is no substantive gain from having them. The strategy is comprised of three pillars: nonproliferation, counterproliferation, and consequence management.⁵

Nonproliferation uses a combination of bilateral and multilateral agreements along with strategic communications and export controls to limit the production and transfer of materials used in the production of Weapons of Mass Destruction.⁶ These are the first actions the United States can take to build international support for the

elimination of the threat. By the simple nature of treaties and economic sanctions, these actions primarily focus on state entities. The second major component of nonproliferation, security cooperation and building partner capacity, focuses on assisting our allies and friends in being self sufficient in their own protection. This also serves as a deterrent by demonstrating the United States' capabilities to respond to the use of chemical, biological, radiological, or nuclear weapons. If the United States is successful in controlling access to critical technology and demonstrating an overwhelming ability to respond, this should keep most nations from even attempting to acquire or develop WMD capabilities.

While many people will see the second pillar, counterproliferation, as the next logical step after nonproliferation fails, it is in fact a critical co-equal that must happen concurrently. Unfortunately, chemical, biological, radiological, and nuclear (CBRN) weapons already exist around the world and require actions today through means other than treaties. The United States is capable of countering ongoing proliferation by maintaining the ability to interdict shipments of WMD related material and by providing a credible deterrent. This deterrence consists of the capability to strike with both conventional and nuclear forces, a demonstrated proof that we can both defend against CBRN weapons and mitigate their effects to a level that they will not hinder the U.S. way of life.⁷ A subtle, but important point must be made; the policy is not framed in terms of retaliation but rather conducting deliberate strikes to destroy an adversary's capability. This leaves open the understanding that given just cause the United States may attack preemptively in order to ensure its own security. The defensive portion of the counterproliferation pillar includes both "active defenses [to] disrupt, disable, or destroy

WMD en route to their targets” and passive defense that “must be tailored to the unique characteristics of the various forms of WMD.”⁸ The final portion of this broad pillar includes developing the means to eliminate an adversary’s WMD program during post-conflict operations. Establishing this capability is not only useful from a practical standpoint of avoiding future use by an insurgent force or terrorist organization, but it also serves as an important portion of the deterrent force. It clearly communicates that the United States is serious about stopping the spread of WMD and the cost to establishing and safeguarding a program is not worth any investment by a foreign government.⁹ The United States exercises its role as an international leader through the combination of the counterproliferation and nonproliferation pillars. They allow for open dialogue about stopping the spread of weapons of mass destruction and the means to act should an actor decide to operate outside the international community’s accepted norm.

The third and final pillar, consequence management, is far narrower in scope, but no less important. The US strategy is pragmatic enough to recognize that despite the best efforts of diplomacy, strategic communications, law enforcement, and defense a WMD attack may very well occur. The national strategy focuses most of its discussion on the establishment of the Department of Homeland Security and the need to prepare local first responders. The National Military Strategy for Combating Weapons of Mass Destruction gives us the best description of what WMD Consequence Management is:

WMD Consequence Management includes those actions taken to reduce the effects of a WMD attack or event, including Toxic Industrial Chemicals (TIC) and Toxic Industrial Materials (TIM), and assist in the restoration of essential operations and services at home and abroad.¹⁰

The thought of *reducing the effect of a WMD attack* is easily recognizable as a critical component of this pillar, but equally important is the requirement to *assist in the restoration of essential operations and services*. This carries two vital messages. First, it communicates to a potential adversary that weapons of mass destruction are not worth their investment, because of the nation's resiliency. Secondly, it reinforces to the American populace that weapons of mass destruction will not have a crippling effect on the United States. By not allowing the U.S. population to simply lock themselves in their homes and not return to school or work, we will demonstrate a resolve that will not invite additional attacks.

Seven Years of Change

Given the development of this strategy was in the immediate aftermath of the terrorist attacks of 2001 and in the shadows of the end of the cold war, it provided a good framework to begin the new century. Now seven years later it is time to look at its interpretation and implementation, as well as how others are addressing this same global challenge.

Unfortunately, nonproliferation has seen only minor changes over the seven years. The Chemical Weapons Convention and several bi-lateral nuclear arms treaties between the United States and Russia (originally entered into by the Soviet Union) have remained in place. The results of these have been a continuing reduction in Intercontinental Ballistic Missiles and the destruction of thousands of tons of chemical agents in the possession of national governments. As a leader in the international community, the United States routinely and loudly supported the Nuclear Non-Proliferation Treaty (NPT) in an attempt to limit the spread of nuclear weapons. While

this is not a new treaty, originally enacted in 1958, it has found renewed importance in the 21st century with the rise of international terrorism and desires by more nations to have a larger voice in the world.¹¹ While the current administration is attempting to make diplomatic headway in the areas of chemical and nuclear proliferation, they took a very different approach with biological threats. On July 25, 2001, Ambassador Donald Mahley presented to the Ad Hoc Group of Biological Weapons Convention States Parties in Geneva, Switzerland, the United States' withdrawal from further talks on implementation guidelines for the convention. One of the primary reasons for this action was an inability to come to agreement on inspection protocols that would safeguard "legitimate national security and proprietary information unrelated to illicit activity."¹² Since that time, the United States has done little to reinvigorate its involvement developing multilateral diplomatic solutions to the threat posed by biological weapons. Another area that has received only marginal attention is in the arena of building partner capability through security cooperation. The US embassies continue to invite foreign officers and noncommissioned officers to attend military education in the United States and both bilateral and multilateral exercises are conducted around the world. However, because of the level of US involvement in Afghanistan and Iraq the number of exercises and exchanges must be limited. For instance, the US was only able to provide limited support to one of four semi-annual NATO CBRN Response Battalion certification exercises during 2006-2007.¹³

In contrast, the counterproliferation pillar has seen a much more active seven years from the United States Government. December 2001 saw the United States notify the Russian Federation that they were going to withdraw from the 1972 Anti-Ballistic

Missile Treaty thereby opening the road to establish an active missile defense system in Alaska and Eastern Europe. This major policy change was a clear message to the world that the United States intended to protect themselves and their allies from a rogue nation with a limited number of WMD equipped missiles.¹⁴ Furthermore, several departments within the federal government took steps to improve their ability to stop an attack on the United States. The Federal Bureau of Investigations expanded their already extensive forensics capabilities with the Chemical and Biological Sciences Unit (CBSU) and Hazard Materials Response Unit (HMRU). These unique capabilities support law enforcement efforts nationwide as well as aid in the training of partner nations' law enforcement agencies.^{15 16} The most dramatic changes occurred within the Department of Defense. On February 13, 2006, the Chairman of the Joint Chiefs released a National Military Strategy to Combat Weapons of Mass Destruction. This document both captured much of what the services had started on their own in response to the 2002 national strategy and identifying military mission areas and objectives. While the strategy encompasses all three pillars from the national strategy, it is obvious that the tasks associated with the military element of power are most prevalent in counterproliferation given the need for some means of direct action in order to accomplish strategic ends. This document further refined the military's role to include interdiction, offensive operations, elimination, active defense, and passive defense. The most significant counterproliferation event in the last seven years was Operation Iraqi Freedom. For the first time in US history, the nation went to war with an expressed purpose of preempting the use of weapons of mass destruction by eliminating them before their transfer to international terrorists. This war established the need for a

dedicated force specially trained and equipped to eliminate WMD and reinforced the need for quality intelligence.

These past seven years have also seen developments in the United States' ability to respond effectively to a WMD incident and manage the associated consequences. Of all three pillars, consequence management is probably the most difficult of which to develop synchronized, integrated solutions because of the sheer size of the nation and challenges of a federal system of governments. Early efforts focused, and rightly so, on equipping and training first responders as they are the front line 'soldiers' in consequence management. The establishment of the Department of Homeland Security was intended to eliminate seams between federal agencies and streamline the federal response. While not a weapon of mass destruction, Hurricane Katrina provided numerous lessons learned on how the United States will respond to a catastrophic event on our own shores.

How has the Government Done?

The National Strategy to Combat Weapons of Mass Destruction has provided the president's vision on how the entire interagency should address this catastrophic threat to the nation. While it is obvious that the Departments of State, Defense, and Homeland Security have the primary roles in executing this strategy, it does not alleviate the other departments from also taking actions to combat this threat. In identifying each agency's focus, it raises the question, "is anyone directing or synchronizing actions in order to achieve effects?" While the Department of State has not prepared a specific strategy, their actions appear that they are executing the nonproliferation intent presented in the national strategy. As stated before, their primary treaty emphasis has been on

strengthening the Nuclear Non-Proliferation Treaty. What are they doing about chemical and biological threats? The Homeland Security Council prepared the National Strategy for Homeland Security in October 2007. This specifies the importance of *Preventing and Disrupting Terrorist Attacks* using WMDs, *Protecting the American People, Critical Infrastructure, and Key Resources*, and finally *Responding to and Recovering from Incidents*.¹⁷ It is of interest to point out that the document narrows the WMD threat to being a component of a terrorist attack and not as a potential threat posed by a rogue nation. Given the relative newness of the Homeland Security Council Staff and Department of Homeland Security, it is not overly surprising how long it took to publish this first strategy.

In September 2008, the Partnership for a Secure America released their bi-partisan report of the United States' efforts to improve security from WMD attacks. They gave the U.S. Government an overall grade of 'C'. In their report, they identify three major shortfalls the government must address: no one is overall in charge of converting "resolve into results," there is no strategic plan to link disparate actions, and a failure to build international support.¹⁸ They further expound on these areas in three separate reports for chemical, biological, and nuclear threats.

The report highlights failures to update the list of banned chemical agents within the Chemical Weapons Convention since 1977 to account for the expanded threat posed by Toxic Industrial Chemicals and Libya's, June 2007, withdrawal from an agreement with the United States to destroy its chemical weapons stockpile.¹⁹ In addition to those shortfalls in chemical prevention, it also highlights shortcomings in protecting critical chemical infrastructure within the United States from terrorist attacks.

It was not until 2007 that the Department of Homeland Security identified standards establishing the risk levels for facilities. Under these standards, only one thousand sites nationwide classify in the highest risk category.²⁰

Within the biological threat arena, the supporting report identifies a general lack of emphasis and supporting strategy by the United States government. For instance, across the key national security agencies the personnel working biological threats are buried within sections focused on either nuclear or chemical proliferation highlighting this lack of emphasis.²¹ It does point out successes in finally identifying Cooperative Threat Reduction funds during Fiscal Year 2008 to secure Former Soviet Union bio-warfare sites and U.S. bi-lateral agreements with eighty countries under the Proliferation Security Initiative to interdict the proliferation of biological warfare materials.²² The one area that the report is most critical of, Confidence Building, is a direct fallout from the United States withdrawal from the Biological Weapons Convention. This action has not only reduced the strength of the convention, but also brought into question the United States' resolve with regard to stopping the spread of biological weapons.²³

Given that the proliferation of nuclear weapons poses the greatest existential threat to the continued existence of the nation, the significant effort focused into this arena is reasonable. Of particular note, the United States has made great strides in securing and destroying Russian nuclear warheads, while simultaneously reemploying Russian scientists. However, the Departments of State, Defense, and Energy have often been working at cross-purposes due to a lack of coordination and supervision.²⁴ This need for improved unity of effort is not a newly identified fault but rather one that the government continues to fail to address. Brian Finlay, in his Nuclear Threat report

for the Partnership for a Secure America, points out three efforts dating back to 1997 directed at rectifying the lack of coordination.²⁵

An International Approach, Are We Succeeding?

2003 and early 2004, saw the United States undertake three significant international efforts: The Proliferation Security Initiative (PSI), The G-8 led Global Partnership against the Spread of Weapons of Mass Destruction, and the passing of United Nations Security Council Resolution (UNSCR) 1540. These diplomatic and economic efforts initially carried a strong strategic communications effect by demonstrating the resolve of governments around the globe to halt this threat. They also capitalized on the international community's anti-terrorism sentiments following the September 11, 2001 attacks.

With President Bush leading the effort, the Proliferation Security Initiative established a forum through which participating countries could work together to directly stem the flow of nuclear material. The PSI is unique in specifically stopping materials in transit through an integration of diplomacy, information sharing, law enforcement, and if necessary military action. Between 2003 and May 2008, more than ninety countries joined with seventy of these nations participating in "over 30 operational air, maritime, and ground interdiction exercises."²⁶ The PSI has proven to be a success for the United States in not only increasing partner capabilities but also in building diplomatic credibility for future endeavors.

The G-8 Global Partnership "committed their countries to prevent [ing] terrorists or those that harbor them from acquiring or developing nuclear, chemical, radiological and biological weapons, missiles and related materials, equipment and technology."²⁷ In

order to accomplish this goal they set forth an objective of raising \$20 billion over ten years predominately targeted at reducing Russia's CBRN stocks and infrastructure. A distinct positive of this effort is that it has allowed countries beyond the G-8 to participate in areas that will support their own national interests by identifying how and where their contributions are spent. For instance, Norway funded the dismantlement of four Russian nuclear submarines and supported the Arctic Military Environmental Cooperation. Meanwhile, New Zealand provides funds to chemical weapons destruction at Shchuchye, Russia and plutonium production shutdown at Zheleznogorsk, Russia. In all the initiative had raised \$17.8 billion through 2006.²⁸ While this partnership has succeeded in continuing the international effort to eliminate Russia's extensive stockpiles and reemploy their brain trust before their exploitation by terrorist organizations, it has done little to affect non-former Soviet Union states. Organizations representing fourteen nations and international bodies studied the partnership shortly after its establishment. Key recommendations of their study that require United States efforts to rectify are maintaining political momentum and meeting funding requirements.²⁹ Unfortunately, we have not heard vocal U.S. efforts to ensure this continues; a challenge made even more difficult with the current global economic conditions.

United Nations Security Council Resolution (UNSCR) 1540 was born out of President Bush's September 2003 speech to the United Nations with an intention of closing seams in international law with regard to stopping non-state actors from developing, acquiring, possessing, or transferring WMDs. The United States recognized that current treaties focused solely on state possession and state-to-state transfer, but

that terrorist and weapons dealers who support them would use any means possible to acquire these capabilities. Additionally, current international laws do not apply to individuals. For the first time, the Security Council created a resolution focused on security that dealt with a function rather than a state. A mere seven months after President Bush's speech the resolution passed outlining that states: ". . . refrain from providing any form of support for non-State actors. . .adopt and enforce appropriate effective laws . . . and enforce effective measures to establish domestic controls . . ."³⁰

This single resolution placed the onus on all nations to take active steps to confront this new threat. What it was unable to accomplish was establish consistency between countries or an enforcement mechanism to ensure countries met their obligations.³¹ This resolution opened the door for much follow on discourse about ways to halt terrorist financing with respect to WMD acquisition as well as reinforce 'rule of law' as a means of both combating WMD but also combating terrorism in general.

In all three cases, PSI, the Global Partnership, and UNSCR 1540, we saw great levels of initial enthusiasm and action. However, while the Bush Administration's support around the world waned, so did their ability to carry forth with additional diplomatic efforts.

Recommendations

While it is clear, the United States Government has done much in the last seven years to protect the nation from Weapons of Mass Destruction, it is clear that there is still more to do. In attempting to create a comprehensive approach several seams have been created that must be addressed, efforts have overlapped leading to wasted dollars

and time, and opportunities have been lost internationally. I recommend six areas the government must address in order to achieve the nation's desired end state.

Improve Oversight And Integration. The current efforts to integrate all elements of national power across the interagency must be overhauled. The Proliferation, Counterproliferation, and Homeland Defense IPC must be empowered to require supporting strategies, similar to the National Military Strategy, from critical departments. These include the Departments of State, Homeland Security, Health and Human Services, Defense, Energy, and Justice. Two key aspects of preparing these strategies are first, they should be coordinated with the other departments and secondly, they should include all of the elements of national power. By requiring coordination, not only will gaps and overlapping efforts become apparent, but also equally important the departments will be able to recognize where they can assist each other. Many of the departments will quickly point out that there are elements of national power they cannot influence, for instance, the Department of Defense and the economic element of power. While this is true, by addressing all elements and reviewing the other agencies strategies, each department will have a better understanding of how they can integrate their signals and actions.

Closely linked with this are added responsibilities for the Proliferation, Counterproliferation, and Homeland Defense IPC. They must quickly establish priorities and timelines to close previously identified gaps. Some examples would include increasing international efforts to detect nuclear material before it arrives in the United States, improving early detection capabilities for infectious diseases, implementing of a policy to protect critical chemical industrial facilities, and tracking of toxic chemical

shipments.³² Once this plan of action is implemented they must monitor the actions on a routine basis, both measuring success and failure. This will allow our government to capitalize on our successes, identify new opportunities, and fix problems before we waste too many resources. They can easily model this process on the system the European Union has been using since June 2004 to manage their efforts. This includes publicly released reports on a semi-annual basis.³³ By adding transparency to the process, we reinforce to the American people the actions have been taken and clearly communicate to our adversaries that we serious about our resolve.

WMD Taxonomy. One aspect that needs clearing up in this strategic update is that threats in fact fall into seven categories (table 1). These categories need addressing individually because while we can have a singular overarching policy, department plans require tailoring within each area.

	Large-scale Attack by a Nation-State	Small-scale Attack by an Individual or Terrorist Organization
Chemical	Yes	Yes
Biological	Yes	Yes
Radiological	No	Yes
Nuclear	Yes	Yes

Table 1. Categories of CBRN Threats

Currently, much of our written policy is highly focused on stopping the treat from terrorist, while most of our long standing programs focus on the Former Soviet Union and our diplomatic efforts target stopping rogue states from developing WMD capabilities. By over generalizing that all Weapons of Mass Destruction are equal misses nuances critical to development of doctrinal and material solution. For fifty years, the Army concerned itself solely with large-scale attacks on a battlefield free of civilians. Therefore, the designs of its detection and decontamination capabilities are optimized

for gross levels of contamination. In the case of chemical weapons, it was further limited to specific chemical compounds manufactured to very high standards of purity. The advent of the terrorist threat requires an additional capability, not a replacement capability, to detect a wider range of low dose, more crudely manufactured agent. The Department of Defense must be prepared to operate against both threats, while the Federal Bureau of Investigation only needs detectors designed for the terrorist threat. Similarly, it is not likely that a rogue state or emerging peer competitor nation will attempt to attack us outright with a radiological device. If they would attempt this through a clandestine method, it would look identical to a terrorist attack thereby requiring the same capability need to respond to an al-Qaida attack.

Non-Proliferation Treaties. The United States is failing as a global leader by not engaging effectively with international efforts to halt proliferation through treaties. We need to either re-enter the Biological Weapons Convention (BWC) or actively speak out to begin efforts to develop a replacement treaty that better supports legitimate pharmaceutical industry concerns for proprietary protections. In order to garner international support for such an endeavor, the language would have to start from the BWC so nations would see this as an evolutionary development of biological non-proliferation designed to keep up with the current environment. Other nations cannot see it as an American attempt to protect our economic advantages in pharmaceuticals.

The Chemical Weapons Conventions (CWC) is the next treaty needing an update. There is no need to replace the treaty as it is already driving most of the worldwide chemical weapons elimination. However, like most treaties it was written for a time that has since past. It specifically addresses traditional Chemical Warfare Agents,

but does nothing about agents developed during the latter years of the Cold War or Toxic Industrial Chemicals capable of easy weaponization for use by terrorist organizations. Amendments to the CWC that account for new Chemical Warfare Agents can continue to reduce the threat posed by nations. A treaty that manages Toxic Industrial Chemicals can be both beneficial to the United States' national security and economic well-being by placing tracking controls and transportation limitation for shipments between countries. I am not advocating tariffs but rather volume and routing limitations that reduce the threat of piracy, siphoning for secondary sales to terrorists, or reduced casualties in the event of direct attack by terrorists against the mode of transportation.

Internationally Led Efforts. As has been pointed out, international bodies that the United States can leverage to meet its needs are currently leading numerous efforts. Additionally, the international community sees the European powers as more diplomatically focused than the United States. Therefore, we should support initiatives the European Union is already making in the realm of both nuclear and chemical non-proliferation treaties, as well as invigorate efforts within the United Nations to develop enforcement mechanisms for UNSCR 1540. Doing this allows the United States to remind nations that they are protecting their own national interests by halting the spread of WMD. This will free up the United States to focus its hard work on establishing the new biological treaties and update the other chemical treaties outlined above.

Preemption. The United States must clarify its policy to proactively halt the threat posed by Weapons of Mass Destruction based on a stringent preemptive strategy. The United States must clearly define what is worthy of a preemptive strike while

maintaining the necessary flexibility to use all elements of national power in order to ensure the security of the nation. Given a nation-state that is developing the means and has clearly communicated within the international community a desire to attack the United States with Weapons of Mass Destruction, the option of a preventative attack should be available to the president. It will be critical to the American people and international community to not identify simply an adversary's capability but also, their intent. By doing this, the United States will more closely align to Article 51 of the United Nations Charter with regard to self-defense.³⁴ Additionally, with this revised policy other nations will see the United States as less hostile, while still maintaining a strong leadership position in the international effort to eliminate the global threat posed by Weapons of Mass Destruction.

Conclusion

The past seven years have included dynamic shifts in the world's opinion of the United States. The disjointed and sometimes arrogant implementation of our policies to Combat Weapons of Mass Destruction and Counter Terrorism have done much to shape this discontent. Fortunately, because the majority of the international community shares an appreciation for the threat, it is not impossible to improve our policy and demonstrate global leadership.

By reviewing our policy, those areas that are working well can be reinforced and areas requiring improvement can be effectively addressed. In doing so, the White House needs to take substantive steps to follow through on counter-proliferation and consequence management efforts already underway, close policy gaps, bring a synchronized whole of government approach to the strategy, reinvigorate diplomatic

efforts, and manage strategic execution. By doing this we will regain necessary international momentum and make true progress in safeguarding our population. A failure to take the next step with the strategy will leave the United States vulnerable both now and in the future.

Endnotes

¹ George W. Bush, "Bush State of the Union Address," January 29, 2002, [http://archives.cnn.com/2002/ ALLPOLITICS/01/29/bush.speech.txt/](http://archives.cnn.com/2002/ALLPOLITICS/01/29/bush.speech.txt/) (accessed February 24, 2009).

² U.S. Code: Title 22, Foreign Relations and Intercourse, Chapter 68A, Cooperative Threat Reduction with States of Former Soviet Union, Section 5951, Findings on Cooperative Threat Reduction, http://www.law.cornell.edu/uscode/22/usc_sec_22_00005951----000-.html (accessed 10 October 2008).

³ Presidential Decision Directive 39, "U.S. Policy on Counterterrorism," June 21, 1995, <http://www.ojp.usdoj.gov/odp/docs/pdd39.htm> (accessed 10 October 2008).

⁴ George W. Bush, *National Strategy to Combat Weapons of Mass Destruction*, (Washington, DC: White House, December 2002), 1.

⁵ *Ibid.*, 2.

⁶ *Ibid.*, 3-5.

⁷ *Ibid.*, 2-3.

⁸ *Ibid.*, 3.

⁹ *Ibid.*, 3.

¹⁰ Gen Peter Pace, Chairman of the Joint Chiefs of Staff, *National Military Strategy to Combat Weapons of Mass Destruction* (Washington DC: The Joint Chiefs of Staff, February 13, 2006), 26.

¹¹ Christopher A. Ford, "Disarmament and Non-Nuclear Stability in Tomorrow's World: Remarks to Conference on Disarmament and Nonproliferation Issues", August 31, 2007, <http://www.state.gov/t/isn/rls/rm/92733.htm> (accessed December 1, 2008).

¹² Donald Mahley, "Statement by the United States to the Ad Hoc Group of Biological Weapons Convention States Parties", July 25, 2001, <http://www.state.gov/t/ac/rls/rm/2001/5497.htm> (accessed December 1, 2008).

¹³ Author's personal experience while assigned as Commander, 22nd Chemical Battalion (Technical Escort) 2005- 2007.

¹⁴ Perez-Rivas, Manuel, "U.S. quits ABM treaty," December 14, 2001, <http://archives.cnn.com/2001/ALLPOLITICS/12/13/rec.bush.abm/>, (accessed December 1, 2008).

¹⁵ Federal Bureau of Investigation, "Hazardous Material Response," <http://www.fbi.gov/hq/lab/html/hmru1.htm>, (accessed December 1, 2008).

¹⁶ Federal Bureau of Investigation, "Chemical and Biological Sciences," <http://www.fbi.gov/hq/lab/html/chembio1.htm>, (accessed December 1, 2008).

¹⁷ George W. Bush, *National Strategy for Homeland Security*, (Washington, DC: White House, October 2007), 15, 30-39.

¹⁸ Partnership for a Secure America, *WMD Report Card: Evaluating U.S. Policies to Prevent Nuclear, Chemical, & Biological Terrorism Since 2005*, (Washington, DC: Partnership for a Secure America, September 2008), 2.

¹⁹ Margret E. Kosal, *Chemical Terrorism: US Policies to Reduce the Chemical Terror Threat* (Washington, DC: Partnership for a Secure America, September 2008), 10-11.

²⁰ *Ibid.*, 19.

²¹ Barry Kellman, *Biological Terrorism: US Policies to Reduce the Global Biothreats* (Washington, DC: Partnership for a Secure America, September 2008), 8-9.

²² *Ibid.*, 11, 15.

²³ *Ibid.*, 17.

²⁴ Brian D. Finlay, *Nuclear Terrorism: US Policies to Reduce the Threat of Nuclear Terror*, (Washington, DC: Partnership for a Secure America, September 2008), 12.

²⁵ *Ibid.*, 17.

²⁶ U.S. State Department, Bureau of International Security and Nonproliferation, "The Proliferation Security Initiative (PSI) Fact Sheet," May 26, 2008, <http://www.state.gov/t/isn/rls/fs/105217.htm> (accessed February 10, 2009).

²⁷ Robert J. Einhorn and Michele A. Flournoy, *Protecting Against The Spread of Nuclear, Biological, and Chemical Weapons vol. 1* (Washington, DC: The CSIS Press 2003), 2.

²⁸ Monterey Institute of International Studies, "Global Partnership Funding Commitments," <http://cns.miis.edu/research/globpart/funding.htm> (accessed January 28, 2009).

²⁹ Einhorn and Flournoy, *Protecting Against the Spread of Nuclear, Biological, and Chemical Weapons vol. 1*, 4.

³⁰ Olivia Bosch and Peter van Ham, eds., *Global Non-proliferation and Counter-terrorism: The Impact of UNSCR 1540* (Baltimore, MD: Brookings Institute Press, 2007), 4.

³¹ Ibid., 4-20.

³² Finlay, *Nuclear Terrorism: US Policies to Reduce the Threat of Nuclear Terror*, 21 and Kellman, *Biological Terrorism: US Policies to Reduce the Global Biothreats*, 24 and Kosal, *Chemical Terrorism: US Policies to Reduce the Chemical Terror Threat*, 23.

³³ Council of the European Union, "Policy Documents," <http://www.consilium.europa.eu/showPage.aspx?id=718&lang=en> (accessed 8 October 2008).

³⁴ *The Charter of the United Nations*, chap VII, art. 51.

