Globalization and WMD Proliferation Networks: The Policy Landscape

*Strategic Insights*, Volume V, Issue 6 (July 2006)

by John P. Caves, Jr.

The term "proliferation networks" has come into widespread use since the revelation of the A.Q. Khan nuclear supply network. The term appears in neither the Bush Administration's first *National Security Strategy of the United States of America* nor its *National Strategy to Combat Weapons of Mass Destruction*, both of which were issued in 2002. Yet networks have long been central to WMD proliferation. The first atomic bombs were made possible by a series of scientific breakthroughs, each new one building upon its predecessors. There was open collaboration in the decades preceding World War II among an international network of scientists, primarily physicists, who were intent on advancing science's frontiers. When the U.S. government fully grasped the war-making potential of these scientific advances, it moved to shut down this network by classifying all information relating to the Manhattan Project.

This security action had only limited effect. The Soviet Union utilized its international espionage network to acquire American and others' nuclear secrets and apply them to its own weapons program. All other current or emerging nuclear weapons powers have tapped external sources for technology and materials for their weapons programs. They have done so legitimately under the auspices of peaceful uses of nuclear energy, illicitly through espionage, by direct and witting assistance of other states, or through black or grey market business networks flying below the radar of multilateral export control regimes. States and terrorists also have utilized external supply networks to acquire agents, materials, and technology to produce chemical and biological weapons. As with the U.S. efforts during World War II to deny access to Manhattan Project...
Globalization and WMD Proliferation Networks: The Policy Landscape

Naval Postgraduate School, Center for Contemporary Conflict, 1 University Circle, Monterey, CA, 93943

Approved for public release; distribution unlimited

Report Documentation Page

1. REPORT DATE   JUL 2006
2. REPORT TYPE
3. DATES COVERED 00-00-2006 to 00-00-2006

4. TITLE AND SUBTITLE Globalization and WMD Proliferation Networks: The Policy Landscape

5a. CONTRACT NUMBER
5b. GRANT NUMBER
5c. PROGRAM ELEMENT NUMBER
5d. PROJECT NUMBER
5e. TASK NUMBER
5f. WORK UNIT NUMBER

6. AUTHOR(S)

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School, Center for Contemporary Conflict, 1 University Circle, Monterey, CA, 93943

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:

<table>
<thead>
<tr>
<th>a. REPORT</th>
<th>b. ABSTRACT</th>
<th>c. THIS PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>unclassified</td>
<td>unclassified</td>
<td>unclassified</td>
</tr>
</tbody>
</table>

17. LIMITATION OF ABSTRACT Same as Report (SAR)

18. NUMBER OF PAGES 8

19a. NAME OF RESPONSIBLE PERSON

Standard Form 298 (Rev. 8-98)  Prescribed by ANSI Std Z39-18
information, our subsequent efforts to prevent WMD proliferation have achieved only limited success.

Globalization is not the reason for WMD proliferation and its associated networks, but it has altered their character. WMD proliferation networks have become more globalized over time as a broader scope of state and non-state actors have undertaken to acquire WMD and as the sources of WMD materials and technology have become more diverse and accessible. At the start of the post-Cold War era, policymakers worried primarily about the proliferation of WMD moving from the states of the former Soviet Union to rogue states. As the 1990s progressed, they increasingly recognized and fretted about “secondary WMD proliferation” occurring among increasingly WMD-capable rogue states. After the 1995 Aum Shinrikyo sarin attack in Tokyo, and to a much greater extent after 9/11 and the Fall 2001 anthrax letter attacks, the United States has become obsessed with terrorists’ explicit pursuit of and ability to acquire or develop WMD—including through that pervasive medium of modern globalization, the Internet.

Most recently, the A.Q. Khan network demonstrated that a non-state actor could act like a multinational “prime contractor” in providing rogue states and possibly others with the expertise and materials to produce nuclear weapons through non-state sources as diverse as Malaysia, Turkey, South Africa, Dubai, and Western Europe. The Administration indicates that Khan’s network has been shut down, but we must at least assume that elements of it could be reassembled or that similar networks exist or could come into being. The rising prominence of non-state actors—terrorists and profit-minded suppliers exploiting the opportunities created by globalization—represents the most salient and disturbing new development in our evolving understanding of WMD proliferation networks. The real challenge of globalization with regard to WMD proliferation, I believe, is to recognize, adapt, and apply our methods of prevention to the new actors and means of proliferation that globalization entails.

**Bush Administration Policy**

The Bush Administration certainly assumed office in 2001 with the view that the country confronted a changed and more dangerous WMD threat than had the previous Administration in its early years. The new Administration would recognize at the core of that increased threat a nexus of technology and radicalism. Globalization is a central feature in this nexus. It expands access to the technologies of mass destruction and is coupled with the active pursuit of WMD by actors hostile to the liberalizing forces of globalization and the influence of its principal purveyor, the United States. Of course, the Administration had al Qaeda, Iraq, North Korea, and Iran foremost in its mind in this regard.

The President set the bar high in identifying the Administration’s goals in combating the WMD threat. Whereas the Clinton Administration had promulgated a presidential WMD policy focused on nonproliferation, the Bush Administration redirected the United States toward a policy focused on counterproliferation. He asserted in his National Security Strategy that “Our enemies have openly declared that they are seeking weapons of mass destruction, and evidence indicates that they are doing so with determination. The United States will not allow these efforts to succeed.” He underscored this determination in his National Strategy to Combat Weapons of Mass Destruction by stating, “We will not permit the world’s most dangerous regimes and terrorists to threaten us with the world’s most destructive weapons.”

The Administration accorded increased emphasis on counterproliferation to achieve its ambitious goals. Despite the previous Administration’s Defense Counterproliferation Initiative, the incoming Administration felt that the United States writ large had remained overly reliant during the 1990s upon traditional nonproliferation approaches. Arms control treaties, multilateral nonproliferation regimes, and other diplomatic efforts, though necessary, had not proven sufficient to prevent determined adversaries from acquiring WMD. By the end of 2001, preventing,
and preparing for, the potential use of proliferated WMD had become a national priority at least as important as preventing further proliferation. Counterproliferation was but one—and not necessarily a leading one—of the numerous objectives in the 1993 presidential policy guidance on WMD threats. In contrast, counterproliferation is first of the three pillars of President Bush's 2002 National Strategy to Combat WMD, alongside nonproliferation and consequence management.[10]

The Administration also resolved to use more active and robust means to combat both the use and proliferation of WMD. This was immediately evident in the Administration’s determination to expedite a strategic missile defense system for the United States and not to allow the 1972 Anti-Ballistic Missile (ABM) Treaty to stand in the way. It became more pronounced with the Administration’s assertion of its right and intent to act preemptively, if necessary, to forestall or prevent hostile acts by WMD-armed adversaries, albeit not necessarily by military means.[11] The decision to withdraw from the ABM Treaty and, especially, the professed willingness to act preemptively proved controversial, particularly abroad. Many allies and friends, as well as foes, viewed these developments as evidence of a dangerously assertive unilateralism by a state of unprecedented and unrivaled power. This was particularly so when viewed in conjunction with other controversial moves like withdrawing U.S. support from the Kyoto Convention on global warming and actively opposing the International Criminal Court.

Proactive interdiction is another central element of the Administration’s more vigorous approach to combating WMD. In contrast to missile defense and preemption, proactive interdiction has been embraced by a large part of the international community—for reasons to be discussed later. The Administration’s strategy describes proactive interdiction, working both internally and with friends and allies, to enhance the capabilities of the military, intelligence, technical, and law enforcement communities to prevent the movement of WMD materials, technology, and expertise to hostile states and terrorist organizations.[12] Shortly after the classified version of that strategy was issued, another directive followed establishing a new interagency organizational structure for interdiction. While interdiction long has been part of the U.S. toolkit for countering proliferation, this Administration has accorded interdiction greater policy attention, coherence, and international prominence, primarily through the vehicle of the Proliferation Security Initiative (PSI).[13]

Efforts to strengthen interdiction capabilities proceeded during the early years of the Administration, but were overshadowed by the prosecution of the war on terrorism, the creation of homeland security structures and capabilities, and the build up to and eventual invasion of Iraq. The President’s controversial invasion of Iraq became the ultimate expression of his determination to preempt developing WMD threats. The decision to invade was a high-stakes gamble. A decisive success might induce other rogue states to abandon their WMD programs—lest they be next. Decisive success refers not only to disposing of the Saddam regime and its assessed WMD capacity, but also to readily establishing the basis for a stable, democratic, and prosperous Iraq. An indecisive result could mire the United States and its military in Iraq for many years and embolden other rogue states to advance their WMD programs. Although the final chapter of the U.S. invasion of Iraq has yet to be written, clearly we have not yet achieved a decisive success.

The U.S. invasion of Iraq did, however, play an important role in inducing Libya to abandon its WMD programs. But those rogue states who waited longer to see how things would unfold in Iraq—including North Korea, Iran, and Syria—may now be even less inclined to relinquish their WMD capabilities than before the Iraq invasion. This is because they can recognize, like other observers, that the United States is in no position, militarily or politically, to initiate major offensive military action elsewhere as long as it is bogged down in Iraq. Without a credible threat of force—even if implicit—to back negotiations for a rollback in WMD programs in North Korea and Iran, it is difficult to imagine those diplomatic efforts succeeding. This situation puts a premium on whatever other measures the United States and the international community can employ to stem the further proliferation of WMD capabilities to and from these and other adversaries.
Today, proactive interdiction, and PSI in particular, is integral to the international community’s approach to accomplishing this goal. It remains a remarkable achievement that France, Germany, the United States, the United Kingdom, and seven other countries were able to launch the PSI just two months after the Iraq invasion had begun—even amidst the intense and open acrimony between proponents and opponents of the military action against Iraq. This achievement testifies to the broad international consensus that had been established about the seriousness of the WMD threat and the need for serious, concerted responses—a consensus that resulted in large part from the labors of both the Clinton and Bush Administrations. It also reflects this Administration’s adoption of an approach toward international action on interdiction that contrasts with the perception, even among allies and friends, that the Administration has a predilection for unilateralism, the use of force, and insufficient regard for international law. The PSI Statement of Interdiction Principles makes clear that participating nations will act in accordance with both international law and their own national statutes. Additionally, each participant will decide on a case-by-case basis whether, and in what manner, they will contribute to PSI activities or operations.

PSI represents another important feature of the Administration’s approach to combating the WMD threat, one that eschews the negotiation of complex, multilateral treaties or agreements for more expeditious and action-oriented solutions.[14] PSI was put together in a relatively short period and constitutes a set of activities rather than an organization. It has no underlying treaty or convention, only a concise statement of shared principles. It is not managed by a permanent secretariat, but rather by regular meetings of each participant’s representatives.[15] Moreover, within just three years, this initiative that began with 11 countries now counts the support of more than 70. It has conducted over 14 operational exercises involving air, ground, and land interdiction scenarios. It contributed to the interdiction of the ship BBC China that helped precipitate Libya’s decision to abandon its WMD programs. And in 2005 alone it contributed to 11 other successful efforts.[16] In 2004, the UN High-Level Panel on Threats, Challenges, and Change encouraged all states to participate in PSI, and Kofi Annan applauded the efforts of PSI to “fill a gap in our defenses.”[17]

PSI and proactive interdiction generally, however, are only part of the United States’ and the larger international community’s wider efforts to stem WMD proliferation. Many other elements—like arms control treaties, nonproliferation regimes, and cooperative threat reduction assistance programs—long predate the George W. Bush Administration. All are supported by intelligence. The revelations about the A.Q. Khan nuclear supply network, however, have prompted a number of new initiatives, many of them building on existing efforts. President Bush articulated the following seven initiatives in his February 11, 2004 speech at the National Defense University:

- Expand the work of the PSI beyond shipments and transfers to also include direct action against proliferation networks. To this end, expand cooperation with law enforcement agencies in addition to the ongoing cooperation between participants’ military and intelligence entities.
- Secure UN Security Council passage of a resolution requiring all states to criminalize proliferation, enact strict export controls, and secure all sensitive materials within their borders.
- Expand the G-8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction in terms of funds, donors, and recipients.
- Agree within the Nuclear Suppliers Group to refuse to sell enrichment and reprocessing equipment and technologies to any state that does not already possess full-scale, functioning enrichment and reprocessing plants. Act to assure the supply of nuclear fuel to countries with truly peaceful nuclear energy programs.
- Allow only states that have signed the NPT’s Additional Protocol to import equipment for their civilian nuclear programs. The U.S. Senate should ratify the Additional Protocol.
- Create a special committee of the International Atomic Energy Agency (IAEA) Board that will focus intensively on safeguards and verification.
• Allow only governments in good standing with the IAEA, i.e., governments not under investigation for Nuclear Nonproliferation Treaty violations, to serve on the IAEA Board.\[18\]

The international response has varied by the initiative, but some important progress has been achieved. In April 2004, the UN Security Council adopted Resolution 1540, thereby criminalizing WMD proliferation to non-state actors and mandating that all UN members establish effective domestic controls to prevent the proliferation of WMD and related materials. In the preceding month, the U.S. Senate ratified the Additional Protocol. Within a month of the President’s speech, PSI core members endorsed the President’s PSI initiatives. Progress is ongoing toward increasing cooperation among participating nations’ law enforcement agencies, and strengthening mutual understanding of their relevant domestic law enforcement authorities and capabilities. The Administration has completed work on an Executive Order to combat WMD financing—building on measures used against narcotrafficker and terrorist finances—and should issue this order in the near future.

The picture is more mixed on cooperative threat reduction assistance programs. Although progress recently was announced in U.S.-Russia negotiations toward overcoming them, liability issues have obstructed some cooperative threat reduction work in Russia. The Administration can, and does, emphasize how much progress has been made in cooperative threat reduction assistance programs—including as a result of the G-8 countries’ $20-billion funding commitment in 2002 to these programs and the subsequent expansion in the number of donors for that effort. Critics, however, often highlight the fact that the G-8 countries collectively are still several billion dollars shy of fulfilling their $20 billion commitment. The Administration also emphasizes how many nuclear materials sites it has helped to secure in the former Soviet Union, while critics note that the larger portion of nuclear materials remain in sites not yet secured.

The Administration’s nuclear fuel cycle and IAEA initiatives generally are encountering more resistance. The President’s initiatives in these areas are similar to those advocated by IAEA Chairman Mohammed El Baradei. But El Baradei has advocated a universalist, treaty-based approach while the Bush Administration characteristically seeks to pursue these objectives through the smaller and more flexible Nuclear Suppliers Group (NSG).\[19\] Even in the NSG, however, many countries resist initiatives that they perceive would freeze in place a privileged group of nuclear fuel cycle “haves” and a larger group of “have nots.” Less stringent criteria proffered by other countries reportedly are getting a better hearing. It remains to be seen what will come of these efforts.

**Conclusions**

So, what does one take from this review of the policy landscape? Overall, it is fair to conclude that the conditions for addressing the security challenges posed by WMD proliferation networks are favorable. As evidenced by such significant achievements as the establishment and ongoing expansion of the Proliferation Security Initiative and the UN Security Council’s adoption of Resolution 1540, there is a broad international consensus on the need to act against such proliferation sources. The Administration’s emphasis on action-oriented, multi-disciplined approaches built on expanding coalitions of the willing appears to be an appropriate response to an urgent and dynamic threat. Lacking, at least for the foreseeable future, a credible military threat to back efforts to negotiate the rollback of established WMD programs, greater reliance will have to be placed upon such measures to stem further proliferation to and from states and non-state actors, as well as on deterring, preventing, and protecting against WMD use.

The big question, of course, is whether the approaches being pursued by the United States and like-minded nations will be sufficient to achieve these ends. Continued progress on the law enforcement side of PSI is essential to dealing with the challenges of contemporary modern
networks. Enlisting the direct support for PSI and related efforts from major nations still outside
the initiative—like China, South Korea, and India—would be helpful. More will need to be done to
secure adoption and implementation of measures like those supported by the Administration and
the IAEA Director to make the nuclear fuel cycle less amenable to diversion for weapons
purposes. Many nations will need assistance in order to comply with the requirements of UN
Security Council Resolution 1540 in establishing effective domestic laws, controls, and law
enforcement capabilities to counter WMD proliferation networks.

Integrating various nations’ capabilities to combat WMD proliferation will be an even more
challenging process; indeed, it remains a significant challenge within our own country. For
example, in the area of intelligence, one of the challenges is to lessen the rift that exists between
the state-focused efforts of the counterproliferation community and the more international efforts
of the counterterrorist community. Then, nations could better discover, track, and act against
proliferation between and among state and non-state actors. The WMD Intelligence Commission
has offered recommendations in this area, and there are efforts underway within the National
Security Council, and elsewhere, to address the challenge.

I believe that the Bush administration also needs to give serious consideration to fashioning a
declaratory policy that makes clear to states like North Korea the consequences they could
expect should they transfer WMD capabilities to other actors, particularly to terrorists.
Consideration also should be given to the measures that could be taken to dissuade allies or
friendly nations—like South Korea, Japan, Saudi Arabia and Egypt—from responding to likely
North Korean or emerging Iranian acquisition of nuclear weapons by acquiring such weapons of
their own. For partners like Saudi Arabia and Egypt, this may need to include extending to them
the protection of the U.S. nuclear umbrella.

Finally, the United States must continue efforts to enhance its ability to detect and defend against
WMD use, including the establishment of the new Domestic Nuclear Detection Office, since even
our best efforts at dissuasion and deterrence may not succeed often enough.

About the Author

Mr. Caves joined the National Defense University’s Center for Counterproliferation Research
(now Center for the Study of Weapons of Mass Destruction) as a Senior Research Professor in
October 2003. His work at the Center has focused on issues of combating WMD strategy and
nuclear and chemical weapons threats. He previously served as Deputy Director for
Counterproliferation Policy in the Office of the Secretary of Defense (OSD). In that capacity, he
played an active role in preparing U.S. forces for biological and chemical weapons threats in the
Persian Gulf region and Korea, including through participation in the development of anthrax and
smallpox vaccination policies and securing enhanced capabilities against novel chemical agent
threats.

Among his other assignments during 17 years with OSD were Country Director, Office of
European Policy, and Deputy Director for Plans, Defense Security Assistance Agency. Mr. Caves
holds a Master of Public Affairs degree from Princeton University, a MS degree from the National
War College, and a BA degree from Boston College. He twice received the Secretary of Defense
Medal for Meritorious Civilian Service; he also received the Secretary of Defense Medal for
Exceptional Civilian Service.

For more insights into contemporary international security issues, see our Strategic Insights
home page.

To have new issues of Strategic Insights delivered to your Inbox, please email ccc@nps.edu
References


2. The definition of counterproliferation has evolved over time and still means different things to different people. In the Clinton Administration’s early years, counterproliferation was defined in organizational terms as everything done by the Defense Department to counter both the proliferation and use of WMD. Nonproliferation was defined as an umbrella term for all U.S. activities to counter WMD. This was done primarily for bureaucratic reasons. Over time, counterproliferation has been defined more in functional terms as measures taken by a number of organizations to deal with WMD use, while nonproliferation has been defined as measures concerned with WMD proliferation. Interdiction is one measure that straddles those two definitions. Indeed, the Bush Administration’s strategy documents initially identified interdiction as a nonproliferation measure and later as a counterproliferation one. In its 2002 National Strategy for Combating WMD, the Bush Administration ended up defining counterproliferation essentially in terms of active measures—often, but not exclusively, of a military nature—taken to prevent, defeat, defend against, and respond to proliferation and use of WMD, and nonproliferation as the more traditional, diplomacy-based measures of arms control, nonproliferation regimes, export controls, and sanctions. That strategy document also defined consequence management as separate from both counterproliferation and nonproliferation.

3. For an excellent discussion of the role of open, international scientific collaboration in the scientific discoveries paving the way for the atomic bomb, as well as of the U.S. government’s subsequent classification of Manhattan Project information, see Richard Rhodes, *The Making of the Atomic Bomb* (New York: Touchstone, 1986). For a discussion of how the Soviet Union conducted espionage against the U.S. nuclear weapons program and applied the resultant information to its own nuclear weapons program, see Richard Rhodes, *Dark Sun: The Making of the Hydrogen Bomb* (New York: Touchstone, 1996).


13. It is worth recalling here that when the 1993 Defense Counterproliferation Initiative was launched, it was controversial both within the U.S. government as well as abroad. Elements of the State Department, in particular, reportedly viewed the initiative as a Defense Department challenge to the primacy of traditional nonproliferation approaches in countering WMD threats. Similarly, allies reportedly were initially cool to this more aggressive response to the threat. For example, it took some effort on the part of the United States to persuade its NATO allies to establish a Senior Defense Group on Proliferation to define and advocate a counterproliferation role for the Alliance. Interdiction was one of the more sensitive elements of the new counterproliferation paradigm, invoking concern that this traditionally diplomacy and law enforcement-driven activity would be overshadowed and potentially undermined by interdiction operations by military forces. Concerns like these may help explain why interdiction figured less prominently in the previous Administration’s counterproliferation efforts than in those of the current Administration. See Jeffrey A. Larsen, *NATO Counterproliferation Policy: A Case Study in Alliance Politics*, INSS Occasional Paper 18 (Colorado Springs, CO: USAF Institute for National Security Studies, November 1997).

14. Some other examples include the successful pursuit of a UN Security Council Resolution (UNSCR 1540) to criminalize WMD trafficking and mandate associated domestic authorities and controls, and the uncharacteristically rapid negotiation and conclusion of the unusually brief Strategic Offensive Reductions Treaty with Russia.


