

*The Proliferation Security Initiative:
A Model for Future International Collaboration*

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Preface

The purposes of this monograph are: to assess the performance of the Proliferation Security Initiative (PSI) since its inception in May 2003; to identify ways to improve it; and to assess its suitability as a model for future international cooperation in other areas. Its sourcing is unique—drawing on the authors' firsthand experiences as senior U.S. Government officials in the creation and early years of PSI, as well as on numerous interviews with other officials from the United States and partner governments who were closely engaged in PSI's establishment and operation.

Politicians, policymakers and outside observers, both in the United States and abroad, are agreed that the proliferation of weapons of mass destruction (WMD), and especially of nuclear weapons, is one of the greatest threats facing the world in the 21st Century. Proliferating states and terrorist groups are busily working to develop or acquire a nuclear device and other WMD. Most believe it is only a matter of time before these actors possess the means to blackmail, threaten, or attack the United States and its friends and allies.

For the last several decades, the treaties, nonproliferation regimes, and export control mechanisms that developed during the Cold War era have served their purpose well, and must be strengthened and sustained. However, just as proliferators and outlaw states have designed ingenious ways to circumvent, manipulate, or altogether avoid these arrangements in order to acquire WMD, their delivery systems, and the materials necessary to develop them, so too must like-minded governments develop new means to combat this growing threat. The PSI is a modern and successful counterproliferation innovation that grew out of this strategic setting. Improvement of the PSI could have significant, salutary effects on U.S. and international efforts to combat proliferation, thus enhancing U.S. national security and international stability. U.S. and UN actions following the second North Korean nuclear test underline the essential role that PSI can and should play in today's security environment.

Although this study should be useful for historians and academic students of WMD proliferation and other national security issues, it is intended first and foremost for policymakers. The authors hope that it will help the new U.S. Administration advance the relevance, importance, and value of PSI, take new steps to increase its effectiveness, and apply PSI-like methods to other difficult international security challenges.

It is with these aims that the project's authors, sponsors, and the National Institute for Public Policy have endeavored to complete this project in a comprehensive, credible, and practical manner. I am confident we accomplished this task.

Two individuals deserve particular credit for their contributions to this study. Dr. Mark Esper was instrumental in the early stages, establishing the conceptual framework and charting the initial way forward. Dr. Susan Koch played an invaluable role in all aspects of the project—from researching to writing. Her exceptional academic and policy skills are reflected throughout the monograph, especially in the findings and recommendations that we offer for consideration.

Dr. Robert G. Joseph
Senior Scholar
National Institute for Public Policy

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Notes on Sources

As an important part of the research for this monograph, the authors interviewed current and former U.S. and foreign government officials who had been (and in many cases remain) closely involved in the development and operation of the Proliferation Security Initiative. The interviews and any related written communications were conducted on a not-for-attribution basis. Therefore, insights and information included here that were gained solely through one or more of these interviews or personal communications are attributed simply to "Interview(s)" or "Personal Communication(s)" with the month and year, and do not identify the individual.

Information included in this monograph is, to the extent possible, current as of June 15, 2009.

Executive Summary

Evolution of the Proliferation Threat and Response

The Proliferation Security Initiative (PSI) builds on a history of international efforts to prevent the illicit spread of nuclear, biological and chemical weapons of mass destruction (WMD), missile delivery systems, and related materials and technology. Fifty years ago, extensive proliferation of nuclear weapons was widely expected. Biological and chemical weapons programs were well established in numerous countries. Missile delivery systems were still the province of the United States and the Soviet Union, but the technology was spreading. Over the next three decades, the international community established legally-binding agreements against nuclear proliferation, biological weapons and chemical weapons. Smaller groups of states acted to limit the spread of long-range missile delivery systems and to constrain trade in dual-use material and technology that could support WMD or missile programs. The near-universal adherence to the 1968 Nuclear Nonproliferation Treaty (NPT), 1972 Biological and Toxin Weapons Convention (BWC) and 1993 Chemical Weapons Convention (CWC) reflects the widely-held consensus on the norms they established.

The United Nations Security Council (UNSC) entered a new, more active phase against WMD and missile proliferation in April 2004 when it passed UNSC Resolution (UNSCR) 1540, which is legally binding on all UN member states under Chapter VII of the UN Charter. UNSCR 1540 affirms that WMD and missile proliferation is a threat to international peace and security, and requires all member states to: deny any support to non-state actors seeking WMD or their delivery means; enact laws banning proliferation by non-state actors; and implement national controls against proliferation. Further, beginning in 2006, the UNSC has passed several resolutions imposing trade and financial sanctions on Iran and North Korea for their nuclear and missile activities.

Additional important, but fundamentally different, tools to prevent WMD proliferation are U.S. and partner assistance programs to reduce WMD, delivery systems, related materials and technologies, and to secure those which remain. Most of these cooperative threat reduction efforts have been U.S. programs in the former Soviet Union that began in December 1991. However, the programs are gradually broadening to encompass many more donors and recipients worldwide, both now and particularly in the future.

Contemporary Proliferation Threats

Despite the international community's success in creating broadly-accepted norms and new tools against WMD and missile proliferation, the threat today is greater than ever before. The vast majority of states support and comply with the web of treaties, agreements and programs that constitute the traditional nonproliferation regime. However, three categories of actors lie outside that community, creating a proliferation threat more dangerous and difficult to control than at any time in the past.

First, North Korea and Iran both defy international norms of nuclear nonproliferation and respect for treaty and UNSC obligations. Syria appeared well on its way to doing the same, until its nuclear ambitions were at least temporarily halted by the Israeli bombing of what is strongly suspected to have been a plutonium-producing nuclear reactor under construction. All three states, as well as others, probably maintain biological weapons (BW) and/or chemical weapons (CW) programs in violation of their treaty obligations. Second, terrorist groups are actively pursuing WMD, and are not likely to be deterred or dissuaded from

using them. Third, despite the success in dismantling the A.Q. Khan network, non-state facilitators of proliferation almost certainly still exist, motivated primarily by financial gain. The problem is compounded by states such as North Korea, that view proliferation as an important revenue source—including to finance their own WMD and missile programs.

Adding to the complexity and the danger is the widespread availability of the materials, technology, equipment and basic knowledge required to develop and produce WMD and delivery systems. That is especially the case for terrorist groups who would not need sizeable WMD stockpiles to create horrendous human, political and economic destruction if their ambitions to acquire WMD are realized.

Furthermore, successful acquisition of nuclear weapons by some proliferant states could set off a proliferation cascade as others sought to emulate, deter, or defend against them. Iran and North Korea would be the most likely triggers of such horizontal proliferation. In turn, steadily growing nuclear proliferation would enhance the risk that fissile material or even nuclear warheads could be stolen or diverted to terrorists because of insufficient security, regime collapse, and/or official or unofficial cooperation with extremists.

With the end of the Cold War, the 20th Century threat of massive destruction from conflict between two nuclear-armed superpowers was greatly reduced. In its place, a new 21st Century threat has arisen: one of smaller—but still potentially devastating—attacks by multiple antagonists who seek WMD materials in the black and gray markets. While much of the world relied on mutual deterrence for security during the Cold War, new strategies are required to deal with rogue states and transnational terrorist groups who believe they have little to lose and much to gain by acquiring and, at least in the terrorist case, using WMD. Today's threats place new and different demands on intelligence, military, diplomatic, and other government functions. This challenges elected leaders and other policymakers to strengthen traditional forms of nonproliferation, while developing new ways and means to counter existing and emerging proliferation threats.

Origins and Evolution of the Proliferation Security Initiative

On December 11, 2002, President George W. Bush published the *National Strategy to Combat Weapons of Mass Destruction*—an unprecedented comprehensive approach to prevent and protect against WMD and missile proliferation, and to mitigate to the extent possible the consequences of its use. The first counterproliferation element mentioned in the strategy is interdiction, underscoring the importance that President Bush and his Administration placed on this tool to stymie proliferation through the disruption of trade in WMD, missiles, and related materials.

Coincidentally and ironically, on the very same day, the United States and Spain experienced a dramatic interdiction failure. They had worked together on December 9 to stop and seize a shipment of SCUD missiles on board the North Korean vessel *So San*. However, two days later, on December 11, the United States released the shipment, after the Government of Yemen protested at the highest levels, reversing itself and insisting that it owned the missiles. The subsequent “lessons learned” exercise within the U.S. Government led directly to President Bush’s proposal, in a speech in Krakow on May 31, 2003, for the creation of the Proliferation Security Initiative.

The 11 original members of PSI—Australia, France, Germany, Italy, Japan, Netherlands, Poland, Portugal, Spain, United Kingdom and United States—began almost immediately to flesh out the President’s proposal. The task was given to Foreign Ministry Political Directors or the equivalent, who were well-positioned to act quickly. After their third meeting, in September 2003, the members issued the Statement of Interdiction Principles, essentially the “constitution” of PSI. Since that time, the single criterion for PSI participation has been endorsement of the Statement of Interdiction Principles. The

Statement creates no new legal obligations and stresses that implementation must be “consistent with national legal authorities and relevant international law and frameworks.” Nonetheless, it is focused on action, expressing the participants’ strong political commitments to interdict proliferation shipments, share information on suspected proliferation activities, and prevent proliferation from their own territories.

The Statement of Interdiction Principles quickly won broad support. Over 50 countries had endorsed the statement by October 2003; over 60 by March 2004; over 75 by June 2006; and 95 by May 2009. Still, distribution is uneven. European participation is near-universal, but Sub-Saharan Africa and South America are seriously underrepresented, and important coastal states throughout Asia currently remain outside the Initiative.

The 11 original PSI partners, joined later by Canada, Norway, Singapore, and Russia, constituted a “Core Group” that set the basic policy direction for the Initiative. However, as PSI participation grew, the Core Group became increasingly politically awkward, and was abandoned after March 2004. In the subsequent five years, PSI policy meetings have been mostly ceremonial affairs marking anniversaries of the Krakow speech, and open to all PSI participants.

Regular PSI meetings are now confined to the Operational Experts Group (OEG), composed of the 15 Core Group members plus Argentina, Denmark, Greece, New Zealand, and Turkey. OEG delegations initially were dominated by defense ministries; over time they expanded to include breakout groups on intelligence, law enforcement and legal authorities. In order to encourage more active PSI involvement by other states, the OEG now plans to meet less often in full session, and to arrange instead broad regional meetings.

Capacity-building has been a central goal of PSI. This includes raising threat awareness and improving the readiness and capabilities of the partners to act on short notice. Since PSI’s establishment, participants have held 37 interdiction training exercises, with three more planned through 2009. Most have had a maritime focus, but a substantial number have concerned ground, air or port interdictions. PSI’s exercise program began almost immediately, and sustained a rapid rhythm over the first few years. With time, however, the pace of PSI exercises has slowed: from four in the fourth quarter of 2003, to nine in 2004, to six each in 2005-2007, to five in 2008, and to four planned for 2009. The cause may be a loss of political momentum and/or increased budget stringencies. On the more positive side, a growing number of exercises are being led by states that were not initial PSI partners.

Relatively little public information is available on actual PSI interdictions of proliferation shipments. Occasionally, senior officials give summary information about total interdictions (for example, then-Secretary of State Condoleezza Rice’s remarks on the second anniversary of the President’s Krakow speech in 2005, and then-Acting Under Secretary of State John Rood’s press briefing before the PSI fifth anniversary meeting in 2008), or about individual cases (for example, then-National Security Advisor Stephen Hadley’s remarks to the PSI fifth anniversary meeting). However, the sensitivity of the intelligence and operational information involved in interdictions, and political reluctance by some partners to publicize their involvement, have barred any systematic release of public information about these actions.

The best known PSI interdiction was both the first and the one with the most profound counterproliferation impact. In October 2003, just a few weeks after the issuance of the Statement of Interdiction Principles, the United States, United Kingdom, Germany and Italy worked together to halt and seize a shipment of centrifuge components destined for Libya. While that interdiction was a notable achievement in itself, it also played a major part in two much broader counterproliferation victories: the unraveling of the A.Q. Khan network; and Libya’s decision to abandon its WMD and longer-range missile programs.

PSI partners work to identify existing legal bases for interdictions, including possibilities that may be open to some states and not to others. Some partners have done much to strengthen their national laws against proliferation. The United States has signed ship-boarding agreements with nine countries that facilitate interdiction of proliferation shipments on board vessels flying their national flags. PSI partners also support entry-into-force of the WMD proliferation prohibition in the 2005 Protocol to the amended Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (2005 SUA Protocol), and have proposed in the International Civil Aviation Organization (ICAO) a comparable amendment to the 1971 Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation.

Enhancing the Proliferation Security Initiative

PSI has experienced substantial, and in some cases dramatic, success in actively preventing proliferation shipments from reaching their intended destinations. More difficult to measure and to prove, but at least as significant, PSI has also deterred proliferators from continuing their deadly trade, in specific cases and even in general. However, it has inspired others—or occasionally the same ones after an adjustment period—to change their practices to thwart interdictions. PSI partners must continuously adapt to those changes, refining existing tools and developing new ones. Thus, strengthening PSI is not only feasible and desirable, but essential to its continued viability.

The challenge is all the greater as PSI begins to show some symptoms of routinization or “initiative fatigue.” Some participants demonstrate reduced enthusiasm for the PSI mission, less willingness to devote increasingly scarce financial resources to its activities, and less creativity and inventiveness in devising new means to counter proliferators. Fortunately, the steps outlined below to enhance PSI could also help to counter “initiative fatigue.”

First, although the broad support for PSI represents a major achievement, the quality and quantity of its membership should be enhanced. Brazil, China, Egypt, India, Indonesia, Malaysia, Pakistan and South Africa are the most important countries to add as partners, because of their political influence, economic standing, geography and/or WMD- and missile-related activities. Participation should also be encouraged in the most seriously underrepresented regions—Sub-Saharan Africa and South America—and by the remaining Asian coastal states. While the United States should not directly condition foreign or military assistance on a state’s participation in PSI, it should use existing assistance channels and programs to help encourage both PSI membership and counterproliferation awareness and capacity.

Further, all PSI partners should become more active in the Initiative. Some former Core Group members have reduced earlier momentum; some new participants have never been as active as warranted by their capabilities and the proliferation threats they face. PSI partners should also give more attention to helping others build counterproliferation capacities.

Although PSI should remain “multinational, not multilateral,” and “an activity, not an organization,” it should still strengthen its structure, consistent with its fundamental character. The OEG’s plan to focus increasingly on regional meetings is sound, but needs to be fully implemented. Further, OEG membership could be broadened to provide adequate regional representation. Now that South Korea has joined PSI, it should be included in the OEG. If any of the major remaining outliers—Brazil, China, Egypt, India, Indonesia, Malaysia, Pakistan, South Africa—join PSI, they should be added to the OEG as well. The OEG should still meet in full session at least once or twice a year in view of the global nature of the proliferation problem and the transregional character of most proliferation shipments.

The May 2009 decision to designate a single government as the PSI focal point is a welcome one, helping to keep track of actions and other procedural matters. If necessary or desirable, PSI participants

might consider going slightly further by creating a rotating annual chairmanship, such as that used by the G-8. The best approach might be a “troika” of the current, preceding, and succeeding chairs—enhancing the chairmanship’s resources, expertise and experience.

PSI also should restore regular high-level policy meetings. Those seem very important to maintaining strong political-level support for the Initiative, which in turn is critical to its momentum and sense of partnership. Consideration might be given to one annual plenary, and at least one annual policy meeting in each region. Such meetings should not entail any change in PSI decisionmaking processes, and care must be taken to guard against their becoming another multilateral “talk-shop.”

Information sharing among PSI members should be improved through enhancement of the members-only web site maintained by the Government of Germany, making it more comparable to the Information Portal that the United States maintains for the Global Initiative to Combat Nuclear Terrorism (GI or Global Initiative). A central depository for lessons-learned information is especially important. National personnel involved in PSI activities change regularly; a regularized system for sharing information on the past would be invaluable in bringing them quickly up to speed, and improving the collective learning curve. Additionally, national interdiction decision makers and implementers must develop and maintain solid communication links on a regular basis, heightened during exercises and operations, and in subsequent analysis of “lessons learned.” Finally, PSI also needs to improve substantially its public information sharing, to build and retain support for the long term.

Most PSI partners—and certainly the United States—finance their Initiative activities “out of hide”—from regular, non-dedicated operational budgets. Thus far, U.S. combatant commands have agreed to do so; Strategic Command and Southern Command have hosted OEG meetings, and several regional commands have provided assets for most PSI live exercises. Nevertheless, over time, the lack of a dedicated budget may make PSI partners and important components (such as the U.S. combatant commands) increasingly reluctant to chair meetings, lead exercises, etc.—especially if, as expected, most PSI partners face progressively stricter budget constraints over the next several years. The Obama Administration should propose PSI budget lines either for each U.S. Government department with substantial PSI responsibilities, or for the Department of Defense alone, but giving it full authority to transfer funds to other U.S. Government agencies involved in PSI activities.

Several steps could help to reinforce the international legal bases of PSI. First, partners could heighten efforts to expand participation by coastal and transshipment states, especially in Asia, Africa and South America. Second, the United States and/or other leading PSI partners should seek to conclude ship-boarding agreements with remaining states that have flags of convenience. Third, the United States and other PSI partners should ratify the 2005 SUA Protocol as a matter of priority, and should work in the ICAO to achieve the proposed comparable provision governing civil aviation. At least one observer has also proposed amending the United Nations Convention on the Law of the Sea to designate WMD proliferation as a legitimate reason for military ships to visit other states’ vessels in international waters. However, the decision of the U.S. Senate not to take up the Treaty demonstrates that such a change is not feasible in the foreseeable future.

Finally, a central means to strengthen the legal bases for PSI remains improvement of national legislation and enforcement regarding: export controls; criminalization of proliferation; right to seize and hold suspect cargoes and personnel; security of WMD materials, etc. The OEG should expand regional workshops to look closely at partners’ national legal frameworks and areas of needed improvement. Closely related, the OEG should hold more regional workshops with key elements of the private sector: shipping companies; air cargo transporters; insurers; financiers, etc. While such sessions would not strengthen national and international legal frameworks *per se*, they could definitely improve their operation.

Applying the Proliferation Security Initiative Model¹

PSI's success has sparked considerable interest in whether and how it can be replicated in other international issue areas. One definition of the PSI model is very basic: commitment by a core group to advance shared goals—goals that are sufficiently detailed and operational to permit and encourage implementing action. Another, much more detailed, definition of the “PSI model” contains several defining features based on the Initiative's origin and operations.² Those include:

- Foundation of shared, explicit principles;
- High-level political endorsement and support;
- Absence of new legal obligations, unless voluntarily adopted by individual members;
- Broadest possible membership, consistent with the purposes of the Initiative;
- Lack of central bureaucratic structure;
- Periodic meetings of an operational working group or groups;
- No requirement for consensus, except on some procedural matters and by founding members on basic principles;
- Voluntary participation in the Initiative and individual activities;
- Sharing of information, lessons learned, and best practices to enhance members' capacities to fulfill Initiative goals;
- Flexibility to adjust collective practices to meet new or changing requirements; and
- Focus on action.

Global Initiative to Combat Nuclear Terrorism

The Global Initiative to Combat Nuclear Terrorism is the best known, fullest, and most successful application of the PSI model. It too was proposed at the highest level, in this case in a joint declaration by Presidents Bush and Putin. The U.S.-Russian declaration was followed in a very few months by agreement among initial partners on a Statement of Principles “to develop partnership capacity to combat nuclear terrorism on a determined and systematic basis, consistent with national legal authorities and obligations they have under relevant international legal frameworks.” Like PSI, the GI has no central structure, and is open to all states endorsing its Statement of Principles. Also like PSI, the GI has quickly won broad support, with 75 states now partners. Unlike PSI, the GI has two recognized co-leaders in the United States and Russia.

Unfortunately, it is difficult for an outside observer to assess the Global Initiative's full impact, because there is relatively little public information available about specific GI activities. The U.S. Department of State announced in June 2009 that GI partners had conducted over 30 capacity-building activities, but provided few details. The Global Initiative has maintained a detailed Plan of Work since February 2007; however, no partner nation appears to have made it public, except for the release of the initial plan by the

¹ In addition to the actual and potential applications of the PSI model discussed in this Executive Summary, Chapter 5 below addresses three other international activities that offer interesting points of difference and similarity with PSI: the Financial Action Task Force; the World Association of Nuclear Operators; and the World Institute for Nuclear Security.

² An additional model, discussed in the body of this monograph, is provided by Jean-Francois Rischard's concept of “global issues networks,” published in 2002. Arguing that traditional international institutions cannot handle complex global issues, Rischard calls for “global issue networks” to do the job. Those networks would be based on voluntary norms, rather than legislation, with minimal bureaucracy, and rapid start-up and delivery time. Rischard identifies four criteria for success by global issues networks: “speed;” “redefining global legitimacy;” “diversity” (reflecting views and contributions of a range of players); and “compatibility with traditional institutions.”

Russian Mission to the United Nations Organizations in Vienna. One reason might be that the Global Initiative is more focused on developing communications and other capabilities (such as nuclear detection) among partners than on public outreach. Another might be the lack of a GI equivalent to PSI's OEG, to serve as a focus and goad to action. That missing component was at least partially redressed with the establishment in April 2008 of a Global Initiative Exercise Planning Group.

Despite some weaknesses (e.g., taking almost two years to begin training exercises) and the paucity of information on Global Initiative activity, the effort overall appears a success. GI's creation and evolution testify to the strength of the PSI model as an approach to filling in the gaps of the existing regimes.

Combating Nuclear Weapons Proliferation and Promoting Peaceful Nuclear Energy

One possible future application of the PSI model might help foster growth in civil nuclear energy without increased risk of nuclear proliferation. Such an initiative would build, in particular, on the July 2007 Declaration on Nuclear Energy and Nonproliferation by Presidents Bush and Putin. The declaration is reminiscent of the PSI and Global Initiative statements of principles in its definition of a shared vision, outline of specific actions, and call for international cooperation.

Still, there would be challenges in applying the PSI model in this area. Civil nuclear energy is highly capital intensive; relatively few companies (or governments) construct nuclear power reactors, enrich uranium, reprocess fuel, or have the financial and technical resources for advanced research and development on nuclear energy technologies. Consequently, any application of the PSI model in this area would necessarily group countries with very different resources and aspirations—suppliers; current nuclear power operators; aspirants to civil nuclear power who can fully finance national programs; and aspirants who require financial assistance and/or regional cooperation to develop and operate civil nuclear power. The International Atomic Energy Agency (IAEA) and international financial institutions would also be important participants. Further, substantial effort would be required to avoid the reality or perception of a have/have-not dichotomy among the participants.

In 2008, the United States completed memoranda of understanding (MOUs) with Bahrain, Jordan, Saudi Arabia and the United Arab Emirates. Each MOU indicates the U.S. partner's interest in developing civil nuclear energy, and intent not to pursue enrichment or reprocessing—the most sensitive proliferation-related technologies. Those bilateral agreements are important in their own right, but the commitments they contain, and their eventual implementation, would be strengthened in a multilateral, PSI-type network grouping key civil nuclear suppliers, operators and aspirants. However, for two basic reasons, the time may not yet be right for such a multilateral initiative. First, close Russian involvement would be critical, and would almost certainly not happen unless and until the U.S.-Russia “123 agreement,” withdrawn after Russia's invasion of Georgia in August 2008, comes back on track. Second, and more fundamental, the international economic situation must improve sufficiently that potential customer states once again look to civil nuclear power to help propel economic growth and development, and that supplier states feel able to assist needy states' access to that power.

Combating Biological Weapons Proliferation and Promoting Public Health

Another promising, if challenging, area for productive application of the PSI model would be in cooperation to promote global health security—simultaneously combating the threats of biological weapons and biological terrorism, and advancing public health against endemic infectious disease. A wide range of fora and activities now aim to address various elements of this problem. The Epidemic and Pandemic Alert and Response program of the World Health Organization (WHO), and the work programs adopted in 2002 and 2006 by the BWC States Parties, address core issues like: epidemic preparedness and response training and standards; biosafety and biosecurity; capacity building in disease surveillance,

detection, diagnosis and containment; and international response to disease outbreaks. The U.S. Departments of Defense and State have strengthened assistance programs in this area, and look to expand work outside the former Soviet Union.

A new Global Initiative to Combat Biological Terrorism, modeled on PSI and on the Global Initiative to Combat Nuclear Terrorism, could bring together those national and multinational efforts. Such an initiative would neither supplant nor officially include WHO activities or BWC discussions. However, it could act to expand the capacity available to WHO and individual states, as well as to implement independently concepts and recommendations that are only being discussed in the BWC context. Some initiative activities could take place among just small groups of participating states, following the current PSI pattern. Others might be in collaboration with WHO regional or country offices—for example, planning and conduct of disease response exercises.

A new Global Initiative to Combat Biological Terrorism could also focus individual and combined national assistance programs on improving disease surveillance and detection capabilities, as well as on ensuring high levels of biosafety and biosecurity. Meetings of operational experts could bring together scientific, public health, law enforcement, customs and border security personnel to help ensure beneficial scientific exchanges while preventing proliferation of biological pathogens, equipment or expertise, and fostering improved public health, disease surveillance and response.

Global Maritime Partnership

The concept of the Global Maritime Partnership (GMP), or “1000 ship navy,” was inspired by PSI, but has not yet been implemented. GMP was originally proposed by then-U.S. Chief of Naval Operations Admiral Mike Mullen in September 2005. Admiral Mullen called for cooperation among the world’s navies and national military, coast guard and law enforcement to meet diverse maritime threats, including piracy, terrorism, weapons proliferation, drug trafficking, disaster relief and humanitarian evacuations. Subsequent ideas for GMP have closely resembled PSI: no formal structure; reliance on existing legal authorities; voluntary cooperation among partners in capacity-building, etc. However, GMP does not appear to have advanced beyond the concept stage since it was proposed almost four years ago; there have been no international meetings, no identification of partner nations, no exercises or other training conducted as GMP activities, no official statement of principles. A combination of a loose, voluntary structure modeled on PSI and of U.S. leadership appear critical to make that happen.

Cooperation Against Arms Smuggling to Gaza

In March 2009, the United States and eight other NATO and PSI partners adopted a program of action to stop arms smuggling in the Gaza Strip. This initiative differs from PSI in its focus on a very specific mission and its inclusion of relatively few states, without plans for broad outreach. However, in other ways, the action program directly applies the PSI model. Its purpose is “to enhance efforts to prevent and interdict the illicit trafficking of arms, ammunition and weapons components to Gaza and within their jurisdiction to prevent the facilitation of such transfers,” through such measures as: voluntary action; cooperative actions involving only some participants; use of existing national and international legal authorities; and enhanced information sharing.

Another important, PSI-like characteristic of the effort was the speed with which the action program was developed. On January 16, 2009, the United States and Israel signed a Memorandum of Understanding on measures “to stem the flow of weapons and explosives into Gaza.” On January 18, Israel and Hamas instituted cease-fires in Gaza. Two weeks later, on February 5, the Danish Government hosted a workshop on how to stop the arms trafficking into Gaza. Just over a month later, all the workshop

participants except Spain adopted the action program. A follow-up meeting was held in April 2009, and another in June 2009.

It is too early to begin to judge the effectiveness of this effort to stop illicit arms shipments into Gaza. However, the basic approach—applying the PSI model to specific requirements for immediate international action—may hold considerable promise in this and other areas.

Applying the PSI Model - Conclusion

The likelihood of full and exact replication of the specific PSI model in other international security areas appears to be low. Indeed, insistence on following a detailed “PSI template” would be inconsistent with the basic thrust of the Initiative itself, with its emphasis on flexibility and adaptability. The one element of the model that must be present in all cases is, appropriately, the most basic: commitment by a core group to action in pursuit of shared goals. Under that broad definition, the “PSI model” appears to be very much the wave of the future. PSI was not the first such effort, but it has been the most successful, measured by breadth of support, speed of implementation, importance of aims, and depth of international cooperation.

The international community appears increasingly convinced of the need for action to implement and advance shared security goals. In the process, initial fears that efforts like PSI would undermine the formal treaty and agreement structure have virtually disappeared. Instead, there is a new understanding that innovative, active approaches to implementation and enforcement are critical to the long-term viability of existing, and potentially future, treaties and agreements. In turn, PSI and other new initiatives built on the need for action must by definition maintain and, if possible, increase their momentum. They must also counter any “initiative fatigue” by participants. Government officials are accustomed to constantly developing and evolving calls for action on the national level to meet new or changing requirements. They must adjust to the same demands on the international level. Existing and likely future WMD and missile proliferation threats ensure there will be a long-term requirement for constant, ever-changing action to counter them. The challenge is to meet that requirement.

Chapter 1

Evolution of the Proliferation Threat and Response

Introduction

The Proliferation Security Initiative (PSI)³ builds on a long history of international efforts to prevent the proliferation of nuclear, biological and chemical weapons of mass destruction (WMD), missile delivery systems, and related materials and technology. Fifty years ago, extensive proliferation of nuclear weapons was widely expected.⁴ Biological and chemical weapons programs were well established in numerous countries. Missile delivery systems were still the province of the United States and the Soviet Union, but the technology was spreading. Over the next three decades, the international community established legally-binding agreements against nuclear proliferation, biological weapons and chemical weapons. Smaller groups of states acted to limit the spread of long-range missile delivery systems and to constrain trade in dual-use material and technology that could support WMD or missile programs.⁵ The near-universal adherence to the 1968 Nuclear Nonproliferation Treaty (NPT), 1972 Biological and Toxin Weapons Convention (BWC) and 1993 Chemical Weapons Convention (CWC) reflects the widely-held consensus on the norms they established.

Despite those successes, the WMD and missile proliferation threat today is greater than ever before. Compliance with the BWC and CWC is far from perfect; clandestine chemical and biological stockpiles and active programs almost certainly still exist in several countries. The proliferation of nuclear weapons is of even greater concern. Over the last dozen years, India and Pakistan conducted their first announced nuclear weapons tests,⁶ and North Korea has conducted two such tests. Moreover, the world's foremost state sponsor of terrorism, Iran, is pursuing a nuclear weapons capability; other countries, such as Syria, are suspected of having nuclear weapons ambitions; still others are likely to develop and pursue nuclear weapons if other states acquire them. Meanwhile, more and more countries are acquiring missile delivery systems of increasingly longer ranges, as demonstrated by Iran's launch of a satellite in February 2009, and North Korea's launch of a Taepo-Dong II missile in April 2009.

Making matters worse, non-state proliferators like the Pakistani nuclear scientist A.Q. Khan represent a new and dangerous dynamic in WMD proliferation. The problem is compounded by states such as North Korea, that view proliferation as an important revenue source—including to finance their own WMD and missile programs. Most alarming, terrorist groups, al Qaeda chief among them, are endeavoring to acquire and use these devastating weapons.

³ See Appendix A for a list of acronyms and abbreviations used in this monograph.

⁴ For example, in the third Nixon-Kennedy Presidential Debate on October 13, 1960, then-Senator Kennedy said: "There are indications because of new inventions, that 10, 15, or 20 nations will have a nuclear capacity, including Red China, by the end of the Presidential office in 1964. This is extremely serious." As quoted in *JFK on Nuclear Weapons and Non-Proliferation*, Carnegie Endowment for International Peace, November 17, 2003.

⁵ See Appendix B for a listing of key proliferation-related commitments by members of the Nuclear Suppliers Group.

⁶ India conducted its first acknowledged test of a nuclear weapon in May 1998. It tested a fission device in May 1974, but claimed that was a peaceful nuclear explosion.

The dangerous trade in WMD, missiles and related materials and technologies escalated seriously as the constraints of the Cold War ended. Not only did the demand for WMD and delivery systems increase with rising tensions among states and sub-groups around the world in the 1990s and with the growing terrorist threat, the availability of these weapons, materials and technology increased as well. Proliferation trade between rogue states, by commercial and criminal entities within countries, and by transnational non-state groups and actors, all increased substantially.

Thus, the WMD and missile proliferation threat is not only growing, but also becoming increasingly varied and complex. Traditional nonproliferation agreements and activities remain necessary in today's environment, but are insufficient to counter WMD and missile proliferation in the 21st Century.

Nonproliferation Regimes—Binding Prohibitions on WMD

Nuclear

Negotiation of the NPT was completed in 1968, and the Treaty entered into force in 1972. In 1995, the parties agreed to give it permanent duration. The Treaty recognizes five Nuclear-Weapons States (NWS).⁷ It prohibits all other parties from developing or acquiring nuclear weapons, but allows them to enjoy the benefits of peaceful nuclear energy consistent with their obligations. Several countries with strong nuclear weapons potential in the 1960s—Germany, Japan and Sweden are prime examples—chose instead to join the NPT. Over time, other states such as Argentina, Brazil and South Africa have abandoned their nuclear weapons programs and adhered to the Treaty. Today Treaty membership is nearly universal. Only India, Israel and Pakistan have chosen not to join. North Korea was a party, but withdrew in 2002.

The NPT does not include verification provisions, but instead requires all non-nuclear signatories to conclude comprehensive safeguards agreements with the International Atomic Energy Agency (IAEA). The Agency in turn implements safeguards to verify that a state is not diverting nuclear material to weapons purposes. After the first Gulf War, in 1991, the world discovered that Iraq conducted an extensive clandestine nuclear program despite being under IAEA safeguards. In response, the IAEA Board of Governors worked to strengthen safeguards significantly through the development of the Model Additional Protocol.

Although comprehensive safeguards are mandatory for the 185 Non-Nuclear Weapons States (NNWS) Party to the NPT, 26 of them still do not have such agreements in force.⁸ Of those 26 states, none is now of proliferation concern, and only one (Timor-Leste) is in a region of concern. Nevertheless, it is notable that almost 15 percent of the NNWS Parties to the NPT have not complied with this basic Treaty requirement. The large number of African states involved is cause for concern, given the global nature of the proliferation trade. The Additional Protocol is not mandatory; only 91 NPT Parties have brought it into

⁷ The United States, United Kingdom, Russia, France and China.

⁸ International Atomic Energy Agency, *NPT Comprehensive Safeguards Agreement: Overview of Status: Current Status as of 19 May 2009*, http://www.iaea.org/Publications/Factsheets/English/nptstatus_overview.html. The 26 non-adherents include: eight that have signed safeguards agreements, but not yet brought them into force (Andorra, Benin, Cape Verde, Gabon, Mauritania, Montenegro, Sierra Leone, Togo); six that have not signed draft agreements approved by the IAEA Board of Governors (Central African Republic, Chad, Djibouti, Equatorial Guinea, Mozambique, Timor-Leste); and 12 that have not submitted draft agreements to the Board of Governors (Angola, Republic of the Congo, Eritrea, Guinea, Guinea-Bissau, Kenya, Liberia, Micronesia, Rwanda, Sao Tome and Principe, Somalia, Vanuatu.)

force, and another 31 have signed it.⁹ The most prominent member of the latter group is Iran, which has refused repeated IAEA Board of Governors and UNSC calls for its implementation.

Today, nine countries are known to possess nuclear weapons—the five NWS and the four non-parties to the Treaty. India and Pakistan detonated nuclear devices in 1998 and North Korea in 2006 and 2009. North Korea developed its weapons illicitly while a member of the NPT, and then exited the Treaty. While remaining an NPT member, Iran is pursuing a capability that could provide it with nuclear weapons, and Syria may have been doing so as well—at least until Israel bombed a suspect site that gave every appearance of being a North Korean-designed plutonium-producing reactor. The IAEA has found Iran in violation of its NPT and safeguards obligations, and the UNSC has for several years mandated an end to its uranium enrichment and plutonium reprocessing activities, but to no avail. Making matters demonstrably worse, Iran and North Korea are autocracies with potential for volatility; Iran has close links to religious extremists and terrorist groups; and Pakistan struggles with extremist and terrorist influence, and is constantly at risk of violent upheaval.

Biological

The BWC entered into force in 1975. It prohibits the development, production, and stockpiling of biological and toxin weapons. As of May 2009, the BWC has 163 States Parties; another 13 states have signed the Treaty but not brought it into force; 19 have not signed it.¹⁰ Again, African states are disproportionately represented among the non-adherents. While no country has publicly admitted possessing an offensive biological weapons (BW) program or stockpile, several countries that are parties to the Treaty, such as China, Cuba, Iran, North Korea, Russia, and Syria, are suspected of having some biological weapons capability.

Covert BW programs are difficult to detect. Much of the material, equipment and know-how required to produce biological agents and toxins has legitimate medical, agricultural, or industrial purposes. Moreover, BW can be produced in very small facilities, as compared to the industrial-size complexes required for chemical and nuclear weapons. Further, many of the dangerous pathogens that are prime candidates for biological weapons—such as anthrax, plague, ebola, etc.—are endemic in several, predominantly poor, regions of the world. Laboratory work on those pathogens serves an essential public health purpose, but could also provide cover for biological weapons development. Because these agents are easy to deploy, highly lethal, and difficult to control, they constitute a grave threat to people and food supplies. The danger is growing as biotechnology continues to advance and become more accessible.

The BWC does not include any verification provisions. A years-long effort by a BWC Ad Hoc Group to develop a verification protocol ended in 2001, when the United States withdrew support for the effort. The United States had two principal objections: first, that effective verification of the BWC was not feasible, even with highly intrusive measures; and second, that such measures could harm compliant states, jeopardizing legitimate national and commercial security requirements.

⁹ International Atomic Energy Agency, *Strengthened Safeguards Systems: Status of Additional Protocols*, http://www.iaea.org/OurWork/SV/Safeguards/sg_protocol.html.

¹⁰ United Nations Office at Geneva, *Disarmament: Membership of the Biological Weapons Convention*, <http://www.unog.ch>. The signatories that have not ratified the BWC are: Burundi, Central African Republic, Cote d'Ivoire, Egypt, Guyana, Haiti, Liberia, Malawi, Myanmar, Nepal, Somalia, Syria, and Tanzania. The non-members are: Andorra, Angola, Cameroon, Chad, Comoros, Djibouti, Eritrea, Guinea, Israel, Kiribati, Marshall Islands, Mauritania, Micronesia, Mozambique, Namibia, Nauru, Niue, Samoa and Tuvalu.

Chemical

The CWC entered into force in 1997. It prohibits development, production or stockpiling of chemical weapons (CW), and requires destruction of existing stocks. CWC adherence is nearly as universal as the NPT, with 188 States Parties as of June 2009; another two states have signed but not ratified, and five have not signed or acceded to the Convention.¹¹ A number of countries, including the United States and Russia, are behind schedule in destroying their declared stocks, and major questions remain as to whether Russia's declaration is full and accurate.

Even more serious, as reported by the Congressional Research Service (CRS), "some CWC signatories (such as Iran and China) and several countries that have not ratified the Convention (such as Egypt, Israel, North Korea and Syria) may still be developing or producing CW."¹² While modern chemical weapons are extremely lethal, they can be difficult to employ, and must be used in relatively high volumes to have mass effect. This normally requires large, industrial facilities to produce CW in such amounts, making them easier to detect than comparable BW facilities. However, "easier" does not mean "easy." CW facilities are nearly identical to those used to produce commercial products for peaceful purposes, making it difficult to distinguish between the two, and allowing for rapid conversion from peaceful to weapons use.

The CWC has extensive verification provisions, including requirements for detailed reports, routine on-site inspections, and challenge inspections. The Convention is administered by the Organization for the Prohibition of Chemical Weapons (OPCW). As of May 2009, the OPCW had conducted over 3200 inspections in 80 countries, including 1600 at industrial sites.¹³ No challenge inspections have yet occurred.

Voluntary Export-Control Regimes

Important additional nonproliferation tools are provided by several export control regimes that seek to constrain dangerous trade in weapons of mass destruction, delivery systems, related technologies and materials, and conventional weapons. Unlike the NPT, BWC and CWC, the membership of these regimes is far from universal. Indeed, most are composed of key (and in some cases, like-minded) supplier states. The regimes vary considerably in the extent to which their export-control standards have acquired wider legitimacy outside their membership.

Missile Delivery Systems

Missile Technology Control Regime. During the Cold War, the United States, Russia, and a few other major countries such as France and China, produced a large number and variety of ballistic missiles of steadily increasing range. Several original producers also sold missiles or transferred production technology to a wide number of countries: the seemingly ubiquitous Soviet SCUD is a prime example.

¹¹ Organization for the Prohibition of Chemical Weapons Technical Secretariat, *Note by the Technical Secretariat: Status of Participation in the Chemical Weapons Convention as at 21 May 2009*, Office of the Legal Adviser, S/768/2009, 27 May 2009. The two states that have signed but not ratified are Israel and Myanmar. The five that have not signed or acceded are Angola, Egypt, North Korea, Somalia and Syria.

¹² Paul K. Kerr, "Nuclear, Biological and Chemical Weapons and Missiles: Status and Trends," *CRS Report for Congress* (Washington, DC: Congressional Research Service, 2008), p. 16.

¹³ Organization for the Prohibition of Chemical Weapons, "Director-General Addressed the 12th International Chemical Weapons Demilitarisation Conference," *OPCW News 21/2009*, 27 May 2009, at <http://www.opcw.org>.

While there is no international treaty governing the development and/or transfer of ballistic missiles, a number of countries concerned about missile proliferation organized the Missile Technology Control Regime (MTCR) in 1987. The MTCR aims to stem the proliferation of longer-range missile delivery systems by constraining trade in, and coordinating national export licensing efforts over critical materials, equipment and technologies. Most important, the MTCR guidelines establish a “strong presumption of denial” for the transfer of so-called “Category 1” systems—missiles or key components thereof that exceed a 300 km/500kg range/payload threshold.

The MTCR was founded by seven like-minded countries.¹⁴ Its current membership of 34 is more diverse (particularly with the addition of Brazil, Russia and South Africa in 1995), but remains dominated by NATO members. Moreover, and importantly, the MTCR Guidelines are just that—non-binding guidelines; actual transfers remain a sovereign decision. Nevertheless, over time, the MTCR Guidelines have become a widely-accepted international standard for countering missile proliferation. Some key countries—notably China, India and Israel—have pledged to abide by the guidelines without becoming MTCR partners. In December 2003, when Libya decided to end its longer-range missile programs, it agreed to limit its remaining missiles to the MTCR 300 km/500 kg threshold.

Despite those successes, dozens of countries have or are developing missiles of various ranges, and over 80 countries are assessed to possess cruise missiles. According to the CRS, “[n]early all countries that reportedly have or are seeking nuclear, biological or chemical weapons also have ballistic missiles....”¹⁵ These trends are expected to continue as production technology and know-how spread, and access to these weapons becomes more widely available. Today, the number of countries possessing or developing long-range ballistic missiles exceeding 1,000 km range has multiplied considerably. The same is true for cruise missile technology.

As mentioned, North Korea is developing an intercontinental-range ballistic missile, and Iran appears to be doing so as well. On February 3, 2009, Iran successfully launched a small satellite into orbit. While the delivery of a nuclear warhead to intercontinental range would be considerably more stressing, the space launch demonstrated that Iran is well on its way to possessing such capability. On April 5, 2009, North Korea conducted what it described as a “satellite launch.” Most observers believe that the purpose of the launch was to test a long-range ballistic missile, the Taepo-Dong II.

Nuclear

Zangger Committee. The Zangger Committee (ZC) was established in 1971 to implement Article III.2 of the NPT, which prohibits export of special nuclear material or equipment specially designed for its production, processing or use, unless the nuclear material is subject to IAEA safeguards. The ZC is an informal body of 37 members, mostly supplier states, all committed to nuclear nonproliferation. The European Commission is a permanent observer.

The ZC maintains a list of equipment that may only be exported if safeguards are applied to the recipient facility. It also provides a forum for members to coordinate on nuclear export issues. The decisions of the ZC are not legally binding on its members, but are expected to be implemented under the political agreement the states have made to act.

Nuclear Suppliers Group. The Nuclear Suppliers Group (NSG) was founded in 1975 to increase controls on the export and re-transfer of materials applicable to nuclear weapons development. The NSG also

¹⁴ Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

¹⁵ Kerr, *op. cit.*, p. 18.

seeks to improve safeguards on, and protection of existing materials. Forty-five states are now members; the European Commission participates as an observer.

The NSG was established by concerned NPT members in response to the 1974 Indian nuclear test, which demonstrated that some technologies not specifically manufactured for a nuclear device could be used, or modified, to develop a nuclear capability. A core function of the NSG was the establishment of a “trigger list” of nuclear equipment, materials or technology—similar to the ZC—that may only be exported to non-nuclear weapons states if comprehensive safeguards are in place or if exceptional circumstances exist. A second NSG set of guidelines covers export of nuclear-related dual-use items and technology. The NSG Guidelines are not legally binding, but are widely accepted and taken seriously by the group’s members. However, controversies have developed in the past over Russian nuclear fuel supplies to India, and continued Chinese supplies to Pakistan. In September 2008, the NSG adopted a U.S.-proposed Statement on Civil Nuclear Cooperation with India, providing guidelines for such trade.

Chemical and Biological

Australia Group. The Australia Group (AG) was established in 1985 to stem the proliferation of chemical and biological weapons by monitoring and controlling the spread of the technologies and materials required to develop them. The AG, established in response to Iraq’s use of chemical weapons in 1984, consists of 41 members (40 states plus the European Commission). The Australian Government chairs the group and serves as its *de facto* Secretariat. Like the NSG and ZC, the AG maintains a common list of technologies that could be used in chemical and biological weapons programs. AG member countries collaborate on the development of this list, and then commit to monitor and control the export and transfer of these technologies.

Conventional Weapons

Wassenaar Arrangement. The Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies (WA) was established in 1996. It currently has 40 participating states; China, India and Pakistan are notable non-participants. A Secretariat in Austria administers the agreement.

The WA is built around agreed-upon lists of restricted technologies that are divided between dual-use goods and technologies that can be used for either commercial or military purposes; it also includes a munitions list that contains only militarily useful items. Participating states agree to limit or restrict sales of listed items to non-WA countries based on a number of factors, such as foreign availability and the ability to control effectively the export of the goods. Like the other export control regimes, the WA’s guidelines are non-binding.

United Nations and WMD Proliferation

The first resolution of the United Nations (UN) General Assembly in January 1946 called for the elimination of nuclear weapons and other WMD as a means to preserve peace, security, and advance human welfare. Today, UN fora for disarmament and nonproliferation issues include the General Assembly First Committee, the UN Disarmament Commission, and the Conference on Disarmament. Some important international efforts to stem proliferation, especially the NPT and CWC, have been proposed and negotiated in these fora.

Nevertheless, for the first 45 years of the United Nations, the United Nations Security Council (UNSC) was not seized with proliferation issues, despite its responsibility for maintaining peace and security. That

began to change in January 1992, when a UNSC Presidential Statement from a summit-level meeting stated for the first time that “[t]he proliferation of all weapons of mass destruction constitutes a threat to international peace and security.” The Statement added that: “The members of the Council commit themselves to working to prevent the spread of technology related to the research for or production of such weapons and to take appropriate action to that end.” Regarding nuclear proliferation, the Statement noted that: “The members of the Council will take appropriate measures in the case of any violations notified to them by the IAEA.”¹⁶

In April 1993, after North Korea rejected an IAEA Special Inspection, the IAEA Board of Governors found the country in noncompliance with its safeguards agreement and referred the matter to the UNSC. The Council responded with a relatively weak call on North Korea to honor its safeguards commitments.¹⁷ In doing so, the Council did not act under its Chapter VII authorities “to maintain or restore international peace and security,” nor did it mandate North Korean compliance. In November 1994, a UNSC Presidential Statement welcomed the Agreed Framework between the United States and North Korea and asked the IAEA to monitor the freeze of North Korea’s plutonium-producing reactors.¹⁸ The UNSC failed to react officially after North Korea ejected IAEA monitors in December 2002 and announced its withdrawal from the NPT.

The UNSC entered a new and more active phase against proliferation in September 2003, four months after President George W. Bush proposed the PSI and just two weeks after the original PSI partners issued the Statement of Interdiction Principles. In this phase the UNSC has not only provided part of the traditional nonproliferation context for PSI, but also has acted to shape it. In President Bush’s September 2003 address to the UN General Assembly, he asked:

...the UN Security Council to adopt a new anti-proliferation resolution. This resolution should call on all members of the U.N., to criminalize the proliferation of weapons—weapons of mass destruction, to enact strict export controls consistent with international standards, and to secure any and all sensitive materials within their own borders. The United States stands ready to help any nation draft these new laws, and to assist in their enforcement.¹⁹

The result, on April 28, 2004, was United Nations Security Council Resolution (UNSCR) 1540,²⁰ in which the Council explicitly acted under Chapter VII of the UN Charter, affirmed that WMD and missile proliferation constitutes a threat to international peace and security, and required all member states: to deny any support to non-state actors seeking WMD or their delivery means; to enact laws banning proliferation activity by non-state actors; and to implement national controls against proliferation (including

¹⁶ Note by the President of the Security Council, United Nations Security Council, S/23500, 31 January 1992.

¹⁷ United Nations Security Council Resolution 825 (1993), 11 May 1993.

¹⁸ Statement by the President of the Security Council, S/PRST/1994/64, 4 November 1994.

¹⁹ White House, Office of the Press Secretary, “President Bush Addresses United Nations General Assembly,” September 23, 2003, <http://georgewbush-whitehouse.archives.gov/news/releases/2003-09/20030923-4.html>. The previous paragraph in the President’s speech addressed PSI, reinforcing the link between the Initiative and the proposed UNSCR: “We’re also improving our capability to interdict lethal materials in transit. Through our Proliferation Security Initiative, 11 nations are preparing to search planes and ships, trains and trucks carrying suspect cargo, and to seize weapons or missile shipments that raise proliferation concerns. These nations have agreed on a set of interdiction principles, consistent with legal—current legal authorities. And we’re working to expand the Proliferation Security Initiative to other countries. We’re determined to keep the world’s most destructive weapons away from all our shores, and out of the hands of our common enemies.”

²⁰ See Appendix C for the text of UNSC Resolution 1540.

physical protection, border controls, inventory and export controls, etc.). In addition, UNSCR 1540 recognized the potential importance of PSI in combating proliferation threats. Specifically, UNSCR 1540 “calls upon all States, in accordance with their national legal authorities and legislation and consistent with international law to take cooperative action to prevent illicit trafficking in nuclear, chemical or biological weapons, their means of delivery and related materials” (emphasis added).

In February 2006, the IAEA Board of Governors voted to report Iran’s safeguards violations to the UNSC, and required Iran to: suspend all enrichment-related and reprocessing activities; implement in full the Additional Protocol, including before ratification; reconsider the construction of a heavy water research reactor; and implement transparency measures requested by the Director General. The initial UNSC reaction was weak: a Presidential Statement in February 2006 calling on Iran to comply with the Board’s requirements, followed by only a slightly stronger resolution in July 2006.²¹

When Iran continued to refuse to comply, the UNSC issued a series of resolutions mandating Iranian compliance and constraining WMD-related trade and financial dealings with that country.²² All those resolutions were under the stronger Article 41 of the UN Charter.²³ However, the outcome was the same: continued Iranian defiance, and progressive growth in the number of its operating centrifuges, and in its stockpile of enriched uranium. In February 2009, the IAEA Director General reported to the Board of Governors that Iran now had enough enriched uranium for a nuclear weapon, although the material would have to be enriched to a much higher level.²⁴ In June 2009, the Director General reported that Iran’s low-enriched uranium production, and production rate, had significantly increased.²⁵

The UNSC has not thus far experienced any greater success with North Korea. On July 4-5, 2006, Pyongyang launched numerous short- and medium-range ballistic missiles, in violation of the September 2005 Six-Party Joint Statement. On July 15, 2006, UNSCR 1695 condemned those launches, demanded that North Korea suspend all ballistic missile activities, and required all states to prevent missile-related trade or financial transactions with Pyongyang. On October 9 of that year, North Korea conducted a nuclear weapons test. On October 14, the UNSC issued the much stronger Resolution 1718, under Article 41, demanding that North Korea return to the NPT, end its nuclear weapons program and suspend

²¹ UNSCR 1696, 31 July 2006, referenced Chapter VII, but under Article 40 rather than a stronger one. Article 40 provides: “In order to prevent an aggravation of the situation, the Security Council may, before making the recommendations or deciding upon the measures provided for in Article 39, call upon the parties concerned to comply with such provisional measures as it deems necessary or desirable. Such provisional measures shall be without prejudice to the rights, claims or position of the parties concerned. The Security Council shall duly take account of failure to comply with such provisional measures.”

²² UNSCR 1696, 31 July 2006; UNSCR 1737, 27 December 2006; UNSCR 1747, 24 March 2007; UNSCR 1803, 3 March 2008. The most recent Resolution, UNSCR 1835, 27 September 2008, reaffirms—but does not add to—the earlier ones.

²³ Article 41 provides: “The Security Council may decide what measures not involving the use of armed force are to be employed to give effect to its decisions, and it may call upon the Members of the United Nations to apply such measures. These may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communications, and the severance of diplomatic relations.”

²⁴ International Atomic Energy Agency, Board of Governors, *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran: Report by the Director General*, GOV/2009/8, 19 February 2009, Derestricted 4 March 2009.

²⁵ International Atomic Energy Agency, Board of Governors, *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran: Report by the Director General*, GOV/2009/35, 5 June 2009, Derestricted 17 June 2009.

its ballistic missile programs, and broadening and strengthening the constraints on member state trade with the country.

Not only did North Korea refuse to comply, it openly defied UNSCR 1718 with its April 2009 Taepo-Dong II launch and May 2009 nuclear weapons test. The UNSC failed to respond to the Taepo-Dong II launch with a new resolution, but did issue a Presidential Statement condemning the North Korean action and identifying it as “in contravention of” UNSCR 1718. Most important, the UNSC members agreed “to adjust the measures imposed by paragraph 8 of Resolution 1718 (2006) through the designation of entities and goods.”²⁶ Among other things, Paragraph 8 of UNSCR 1718 envisages designating additional goods that may not be traded with North Korea, as well as entities supporting proliferation to North Korea whose financial assets should be frozen.

As required by the Presidential Statement, the 1718 sanctions committee agreed on April 24 to subject three North Korean entities and additional missile-related items and technology to the restrictions of Paragraph 8.²⁷ According to press reports, the United States had proposed that 11 North Korean entities be designated, and Japan had proposed 14.²⁸ While the UNSC decision to designate only three firms was disappointing, at least those listed—Korea Mining Development Trading Corporation (KOMID), Korean Ryonbong General Corporation, and Tanchon Commercial Bank—are major North Korean trade and finance entities, deeply involved in the proliferation trade.

The UNSC reacted more strongly to North Korea’s second nuclear weapons test, whose yield reportedly was far more powerful than recorded in the October 2006 test. For several days thereafter, North Korea also launched numerous short-range missiles. UNSCR 1874, passed unanimously on June 12, 2009, extended the ban on military exports from North Korea to all arms, related material, technical and financial assistance. It imposed a similar ban on all military-related exports to North Korea, except for small arms and light weapons—an exception reportedly demanded by China.²⁹ UNSCR 1874 further encourages all states to end all financial assistance to North Korea except for humanitarian or denuclearization purposes, and generally to deny financial services with North Korea “that could contribute” to its WMD- or ballistic missile-related programs.

Finally, and most dramatically, UNSCR 1874 provides unprecedented support for interdiction of military-related shipments to and from North Korea. Essentially it applies to the North Korean case the authorities that would be generally available if and when the amended Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA) and its 2005 Protocol enter into force.³⁰ UNSCR 1874 authorizes and encourages, but does not require, states to inspect cargo in their territory, to and from North Korea, if there are reasonable grounds to believe that they carry prohibited cargo. It also authorizes and encourages such inspections on the high seas, with flag state consent. If the flag state does not consent, the ship is required to proceed to a convenient port for inspection. Member states are

²⁶ United Nations Security Council, *Statement by the President of the Security Council*, S/PRST/2009/7, 13 April 2009.

²⁷ United Nations Department of Public Information, News and Media Division, New York, *Security Council Committee Determines Items, Designates Entities Subject to Measures Imposed in Resolution 1718 (2006)*, SC/9642, 24 April 2009.

²⁸ Joe Lauria, “U.N. Panel Sets Sanctions on 3 North Korean Firms Over Rocket Launch,” *The Wall Street Journal*, April 24, 2009, at <http://online.wsj.com/article/SB124062234518255419.html>.

²⁹ Colum Lynch, “U.S. Imposes Tough New Sanctions on North Korea,” *The Washington Post*, June 12, 2009, at <http://www.washingtonpost.com/wp-dyn/content/article/2009/06/12>.

³⁰ See discussion of the 2005 SUA Protocol in Chapter 3, below.

further required to seize and dispose of any prohibited cargo. However, the resolution does not authorize the use of force. Instead, member states are simply required to report to the 1718 committee when they undertake an inspection or if the flag state does not provide the required cooperation. Finally, UNSCR 1874 requires member states not to provide bunkering services to suspect North Korean vessels, unless necessary for humanitarian reasons or the suspect cargo has been inspected.³¹

Threat Reduction and Nonproliferation Assistance Programs

Fundamentally different, but also important, tools to prevent WMD proliferation are U.S. and partner assistance programs to reduce WMD and related materials, and secure those which remain. The vast majority have been U.S. programs in the former Soviet Union, but the effort is gradually broadening to encompass many more donors and recipients worldwide.

At the instigation of Senators Sam Nunn and Richard Lugar, the U.S. Congress in December 1991 authorized \$400 million in Department of Defense funds for the first program to help Russia and other former Soviet states reduce, and prevent proliferation of, WMD and delivery systems inherited from the Soviet Union. In 1996, the Departments of State and Energy began funding their own programs in this area. By Fiscal Year 2002, the overall U.S. Government threat reduction and nonproliferation assistance effort in former Soviet states totaled over \$1 billion a year. Projects have covered a broad range, including: strategic missile and launcher elimination; nuclear warhead and material storage and transport security; chemical weapons security and destruction; cessation of plutonium production; elimination of biological weapons production capability; pathogen security; and redirection of former weapons scientists and engineers. The Nunn-Lugar Cooperative Threat Reduction (CTR) program played a major part in one of the leading nonproliferation successes of the post-Cold War era: the decision by Ukraine, Belarus and Kazakhstan to denuclearize.³²

In 2002, President Bush called on the other G-8 members³³ to contribute their fair share to this important effort. Specifically, he proposed that the G-8 commit \$20 billion (half from the United States) to WMD and missile threat reduction and nonproliferation projects in the former Soviet Union over the next 10 years. The result was the G-8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, established at the G-8 Summit in Kananaskis in June 2002. By 2008, the Global Partnership included 23 donors, including the European Union.³⁴ Further, the natural end to many projects in the former Soviet states, the increasing ability of Russia to finance projects on its territory, and the emergence of severe proliferation threats worldwide, all led the G-8 to endorse a proposal initially made by President Bush in 2004 for the Global Partnership to work globally.³⁵ The Leaders Declaration from the July 2008 G-8 Summit at Hokkaido states:

³¹ United Nations Security Council, *Resolution 1874 (2009)*, S/RES/1874(2009), 12 June 2009.

³² The number of nuclear warheads left on Ukrainian, Belarusian and Kazakhstani territory after the end of the Soviet Union in December 1991 were each larger than the estimated nuclear arsenals of China, France and the United Kingdom combined.

³³ The G-8 are: Canada, France, Germany, Italy, Japan, Russia, United Kingdom, and United States. Russia formally joined the group in 1997.

³⁴ "Report on the G8 Global Partnership," G8 Hokkaido Toyako Summit, 8 July 2008.

³⁵ In a February 2004 speech at the National Defense University, President Bush said: "...as a result of the G-8 Summit in 2002, we agreed to provide \$20 billion over 10 years—half of it from the United States—to support such programs. We should expand this cooperation elsewhere in the world. We will retain [sic] WMD scientists and technicians in countries like Iraq and Libya. We will help nations end the use of weapons-grade uranium in research reactors. I urge more nations to contribute to these efforts. The nations of the world must do all we can to secure

We are determined to accomplish priority projects under the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction that was launched at the Kananaskis Summit in 2002. Since the risks of the spread of weapons and materials of mass destruction exist worldwide, we agree that the Partnership will address these global challenges particularly in areas where the risks of terrorism and proliferation are greatest.³⁶

Conclusion

The dangers of WMD and missile proliferation have long been recognized. Over the past four decades, the international community has established a range of mechanisms to address this growing problem. It has frequently failed, however, to foresee emerging trends or significant developments, or to take proactive measures to address them in advance. Rather, it has often acted in response to events, as was the case with the establishment of the NSG after India's so-called peaceful nuclear explosion in 1974, formation of the AG after Iraq's employment of chemical weapons during its war with Iran, and development of the Additional Protocol following the discovery of Iraq's nuclear weapons program at the end of the First Gulf War.

Nevertheless, each evolution of policy and practice has drawn a smaller and ever-tightening ring around the proliferation threat. For most of the last four decades, these measures—treaties, supplier regimes, assistance programs—have focused on state-level action of two types. First, three basic treaties prohibit development, production or possession of WMD for either all states (in the case of BW and CW) or for the great majority of states (in the case of nuclear weapons). Second, export control regimes, assistance programs, and UNSCR 1540 are designed to prevent trade in WMD, missiles, and related materials and technologies. Comparatively little attention was placed on what to do if these measures failed.

The measures built up over 40 years have established critical norms and constraints against proliferation, which most states honor. However, they are insufficient to counter actions and ambitions by states, terrorist groups and venal proliferators who reject, and are determined to violate, the established international norms. New, innovative approaches were necessary to combat proliferation in the 21st Century. It was in that context, confronted by the worsening reality of modern WMD and missile proliferation, that the Proliferation Security Initiative was developed.

and eliminate nuclear and chemical and biological and radiological materials.” White House, Office of the Press Secretary, “President Announces New Measures to Counter the Threat of WMD: Remarks by the President on Weapons of Mass Destruction Proliferation, Fort Lesley J. McNair—National Defense University, Washington, D.C.,” February 11, 2004.

³⁶ G8 Hokkaido Toyako Summit Leaders Declaration, 8 July 2008.

Chapter 2

Contemporary Proliferation Threats

Introduction

The large majority of states support and comply with the web of treaties, agreements and arrangements that constitute the traditional nonproliferation regime. However, three categories of actors lie outside that community, creating a proliferation threat that is even more dangerous and difficult to control than the one feared by President Kennedy in the 1960s. First, North Korea and Iran both defy international norms of nuclear nonproliferation and respect for treaty and UNSC obligations. Syria appeared well on its way to doing so as well, until its nuclear ambitions were at least temporarily halted by the Israeli bombing of what is strongly suspected to have been a plutonium-producing nuclear reactor under construction. Second, terrorist groups are actively pursuing WMD, and would feel unconstrained in their use. Third, despite the success in dismantling the A.Q. Khan network, proliferators almost certainly still exist who are motivated primarily by financial gain.

Adding to the complexity and the danger is the widespread availability of materials, technology, equipment and basic knowledge required to develop and produce WMD and delivery systems. That is especially the case for terrorist groups, who would not need sizeable WMD stockpiles to create devastating human, political and economic destruction if their ambitions to acquire WMD are realized.

Furthermore, successful acquisition of nuclear weapons by some states could set off a proliferation cascade as others sought to emulate, deter, or defend against them. Iran and North Korea would be the most likely triggers of such horizontal proliferation. In turn, steadily growing nuclear proliferation would enhance the risk that fissile material or even nuclear warheads could be stolen or diverted to terrorists because of insufficient security, regime collapse, and/or official or unofficial cooperation with extremists.

Many believed that with the end of the Cold War in 1989, and the dissolution of the Soviet Union soon thereafter, the threat of nuclear holocaust—or of any WMD catastrophe—would also fade into history. Unfortunately, this was not the case. The end of East-West tensions unleashed a variety of ethnic, religious, political, economic, and other conflicts around the globe. Armed struggles, border clashes, insurgencies and terrorism, genocide and forced refugee movements, became more common.

In May 2008, at the fifth anniversary meeting of PSI partners, then-National Security Advisor Stephen Hadley described the differences between Cold War and post-Cold War proliferation threats:

Then: One technology, nuclear weapons, was our primary proliferation concern. Now: We face increased threats from state and non-state actors seeking nuclear, chemical, biological, and radiological weapons—and many more methods of delivery.

Then: Knowledge to make these weapons was a state secret. Now: Extremists can learn how to make a dirty bomb on the Internet.

Then: Only states had the infrastructure necessary to manufacture weapons. Now: Dual-use or multi-use technologies are commercially available—and proliferation often hides behind legitimate commerce.

Then: Only states had the missiles or bombers needed to deploy weapons of mass destruction. Now: A truck is the only delivery system a terrorist needs.

Then: Arms control agreements and the IAEA seemed sufficient to meet the proliferation challenge. Now: Cold War institutions remain necessary, but not sufficient. And we need a new approach.³⁷

Terrorism and Proliferation

Today, global terrorist organizations are actively seeking WMD. These groups and individuals do not have a homeland; they seek safe haven in many nations. Al Qaeda and its affiliates have used training and logistics infrastructure in South Asia and Africa, financial nodes and support elements in the Middle East, and operational cells in Europe, North Africa, and North America. Complicating this threat is the Internet, which enhances terrorists' means to recruit, raise funds, and plan attacks without regard to national borders.

The murder of innocent civilians, even in large numbers, is not likely an obstacle to the ambitions of these terrorists—on the contrary, it is an aim central to the very concept of “terrorism.” The acquisition of WMD is seen as the ultimate means to inflict such terror. As one Al Qaeda affiliate reportedly warned: “We will strike you with all the weapons available to us, including conventional, chemical, nuclear and biological weapons. You will see blacker days than the 11th September incidents.”³⁸

The most recent unclassified report to Congress by the Office of the Director of National Intelligence (ODNI) on the acquisition of WMD technology aptly sums up the threat of WMD terrorism:

Several terrorist groups, particularly al-Qa’ida, remain interested in chemical, biological and radiological materials and weapons, and some groups have shown interest in nuclear weapons as well. ...terrorist groups see employing chemical, biological, radiological, and nuclear (CBRN) materials as low-cost, high-impact options for achieving their goals. Al-Qa’ida and other terrorist groups show continuing interest in developing chemical and biological capabilities for use in attacks against Western targets, especially in Iraq and Afghanistan. We also judge that al-Qa’ida and some other terrorist groups have the capability and intent to develop and employ a crude radiological dispersal device.

Our highest concern is al-Qa’ida’s stated readiness to attempt unconventional attacks against the United States. A case in point is the September 2006 statement made by al-Qa’ida in Iraq calling on scientists to join the struggle in Iraq and produce unconventional weapons against American forces in that country. This message regarding unconventional warfare probably demonstrates al-Qa’ida’s continued interest in obtaining and using CBRN weapons in its fight against the United States. At this time, we do not assess that al-Qa’ida has a nuclear weapon capability, although acquisition remains a

³⁷ White House, Office of the Press Secretary, *Remarks by National Security Advisor Stephen J. Hadley at the Proliferation Security Initiative Fifth Anniversary Senior Level Meeting*, Washington Hilton Hotel, Washington, D.C., May 28, 2008, at <http://georgewbush-whitehouse.archives.gov/news/releases/2008/05/print/20080528-3.html>.

³⁸ As quoted in White House, Office of the Press Secretary, *Remarks by National Security Advisor Stephen J. Hadley at the Proliferation Security Initiative Fifth Anniversary Senior Level Meeting*, *loc. cit.*

goal. Al-Qa'ida's key obstacle to an improvised nuclear capability remains acquiring sufficient weapons-usable nuclear material.³⁹

With regard to nuclear weapons, one principal concern is that states with links to terrorist groups, such as Iran with Hezbollah, would transfer a nuclear device or material to a terrorist group. Such transfer could be the result of conscious government policy, action by a rogue official (such as a senior member of Iran's Quds force), or simply weak security for weapons and material. More likely is the transfer to terrorists, via any of the above routes, of radioactive materials for so-called "dirty bombs." Such weapons could cause great social, political and economic harm to a population (in addition to the physical effects on those immediately affected) and leave areas unusable possibly for long periods of time.

Biological weapons may be an even more likely, and hence more dangerous, WMD proliferation threat, especially because so much of the material and equipment needed to produce BW has legitimate industrial, medical, or agricultural purposes. BW span a wide spectrum of lethality, from incapacitating agents to contagious agents with potential lethality comparable to (although slower-acting than) nuclear weapons. As noted above, BW can be produced in small facilities. The biggest challenge faced by a terrorist is the "weaponization" of these agents—the ability to change them into a form that is readily and effectively absorbed by the human body and employable in sufficient volumes and means. Many experts believe that as BW materials, equipment and technology become more available, the ability of terrorists to acquire and disperse biological agents will increase. The task will be even easier for those groups with state sponsorship.

A terrorist attack using CW is probably the least likely of the three to carry devastating consequences, but the possibility cannot be dismissed. The spread of commercially-available materials, information, and technology make chemical weapons more accessible than before to terrorist groups. However, the ability to weaponize, manufacture and disperse them in quantities large and potent enough to create mass casualties remains difficult. State-level sponsorship of such illicit efforts could make a major difference; implementation of the CWC has made these activities more difficult, but far from impossible.

According to the CRS, the Central Intelligence Agency (CIA) has summarized the broader proliferation trends for biological weapons and chemical weapons as follows:

- Developments in biotechnology, including genetic engineering, may produce a wide variety of live agents and toxins that are difficult to detect and counter; and new CW agents and mixtures of CW and BW agents are being developed.
- Some countries are becoming self-sufficient in producing CW and BW agents and less dependent on imports.
- Countries are using the natural overlap between weapons and civilian applications of chemical and biological materials to conceal CW and BW production; controlling exports of dual-use technology is ever more difficult.
- Countries with CW and BW capabilities are acquiring sophisticated delivery systems including cruise and ballistic missiles.
- Scientists with experience in CW and BW production continue to leave countries of the former Soviet Union.
- About one dozen terrorist groups have sought CW, BW, and nuclear material or expressed interest in them; several countries with CW and BW capabilities have sponsored terrorists.⁴⁰

³⁹ Deputy Director of National Intelligence, *Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, Covering 1 January to 31 December 2007*, pp. 6-7.

⁴⁰ Kerr, *op. cit.*, pp. 17-18.

Proliferators, Facilitators and Middlemen

Shaping and driving these trends are many other international actors, from supplier states to proliferation entrepreneurs like Pakistan's A.Q. Khan. The most recent unclassified report by the ODNI on acquisition of WMD-related technology summarized the key supplier states as of 2007, as follows:

North Korea and entities in Russia and China continue to sell technologies and components in the Middle East and South Asia that are dual use and could support WMD and missile programs. North Korea is among the world's leading suppliers of missiles and related technologies. Russian entities have supported missile and civil nuclear programs in Iran and India. Chinese companies have been associated with nuclear or missile programs in Pakistan and Iran.

We also see evidence of secondary proliferation, as countries who previously imported weapons and technologies begin indigenous production and export those systems. As their domestic capabilities grow, traditional recipients of WMD and missile technology—to include Iran and Pakistan—also are capable of supplying technology and expertise. In addition, independent companies, scientists, and engineers may provide WMD- and missile-related assistance.⁴¹

The ODNI report noted that China had improved its export control legislation and enforcement over the past several years. However, as of 2007, "Beijing continued to fall short in its enforcement of its export controls and private Chinese businesses continue to sell materials, manufacturing equipment, and components suitable for use in ballistic missile, chemical weapons and nuclear weapon programs to North Korea, Iran and Pakistan."⁴² Further, "Russian entities have supplied a variety of ballistic missile-related goods and technical know-how to China, Iran, India, and North Korea," and "remain key suppliers of nuclear technology to a number of countries, most of which is intended for civilian nuclear programs."⁴³ Although the report cites "Russian entities" as purveyors of nuclear technology, it is important to note that the great majority, if not all, of those entities are government firms. The relationship between the Russian Government and Russian suppliers of ballistic missile-related goods and technology is less clear, and likely more diverse.

North Korea stands apart, dedicated as a matter of state policy to proliferation of ballistic missiles, related technologies and likely nuclear materials and technology. "Over the years, it [North Korea] has exported ballistic missile-related equipment, components, materials, technical expertise and/or full missile systems to countries in the Middle East, South Asia, and North Africa," and its "relationships with Iran and Syria remain strong."⁴⁴ There is no evidence of North Korean WMD or delivery system transfers to terrorist groups but the possibility cannot be ruled out, particularly in view of Pyongyang's demonstrated willingness to sell to the highest bidder. Concern must also be expressed that other regimes that reject international standards would follow North Korea's proliferation patterns—and expand those to terrorists—if they develop sufficient WMD and missile capability; Iran and Syria are prime candidates, especially given their strong support of Middle East terrorist groups.

Another important trend is the continued existence of commercial suppliers who, wittingly or not, provide sensitive dual-use technologies to unsavory countries or groups. Often these suppliers are motivated simply by profit. At times, simple naiveté and ignorance may be in play—as when scientists and

⁴¹ Deputy Director of National Intelligence, *op. cit.*, p. 7.

⁴² *Loc. cit.*

⁴³ *Ibid.*, p. 8.

⁴⁴ *Loc. cit.*

engineers engage in what they view as straightforward technical exchanges with foreign counterparts. Well-developed domestic export control regimes and vigorous enforcement are critical to constraining the actions of these firms and individuals. As some notable U.S. cases have demonstrated, however, not even the strongest export control systems are immune from violations.

Lastly, the emergence of new non-state actors and networks represents a major proliferation challenge, and one of the most difficult to detect. These proliferators range from criminals and criminal networks seeking to profit from the sale of stolen materials (such as fissile material from Russia), to the actions of individuals such as A.Q. Khan and his cohorts, who acted illegally out of both greed and shared sentiments to provide nuclear technology and know-how to Libya, Iran, North Korea, and possibly others. While the Khan network was brought down in late 2003, it is difficult to know if many of its key personnel who remain at large might seek to resume their previous activities, or if similar networks are, or soon will be, in existence. It is also difficult to know if others are, or are seeking to, emulate Khan's activities.

One of the many lessons from the experience of the A.Q. Khan network is that proliferators can operate anywhere, and might consciously seek to do so in regions of little proliferation concern. Thus, for example, various nodes of the Khan network were located in Malaysia, South Africa, the United Arab Emirates and Mali, and major participants were based in the United Kingdom, Netherlands, Germany, Switzerland and Turkey.

If anything, available knowledge regarding lost or stolen fissile and radiological materials is even more imperfect. Reports of missing material or of illegal sales attempts have declined in recent years, but it is not known if that means actual cases have declined because of increased security or if, instead, the thefts have become more sophisticated, or a combination of the two.

Each of these major trends demonstrates the increasing complexity of today's proliferation challenge. There are surely other trends occurring as well that are not yet recognizable. It is the nature of this problem, much like the war on illegal drugs, that the perpetrators work to stay one step (one innovation) ahead of the enforcers. For these reasons, innovations in combating proliferation must be continuously explored and implemented.

Conclusion

With the end of the Cold War, the 20th Century threat of massive destruction between the nuclear-armed superpowers was greatly reduced. However, a 21st Century threat emerged of smaller—but still potentially devastating—attacks by multiple antagonists, including ones armed with WMD and ballistic missiles. Today, state and non-state proliferators seek WMD, delivery systems, and related materials and technology in the black and gray markets. While mutual deterrence provided the basis for security during the Cold War, new strategies are required to deal with rogue states and transnational terrorist groups, who believe they have little to lose and much to gain by acquiring and—at least in the terrorist case—using WMD. Those threats place new and different demands on intelligence, military, diplomatic, law enforcement, and other government functions. This challenges elected leaders and other policymakers to strengthen traditional forms of nonproliferation, while developing new ways and means to counter today's, and tomorrow's, proliferation threats.

Chapter 3

Origins and Evolution of the Proliferation Security Initiative

Introduction

The Proliferation Security Initiative was developed in the context of increasingly complex and dangerous WMD and missile proliferation threats, as well as of the existing international treaties and arrangements aimed at constraining them. PSI aims not at supplanting long-standing international nonproliferation efforts, but at providing new means for their effective enforcement, filling critical gaps in the overall global structure to counter WMD and missile proliferation. Further, PSI is grounded in the rule of law—not thwarting existing legal strictures, but taking advantage of the international and national legal frameworks that allow interdiction and other counterproliferation action.

As those central features of the Initiative became widely understood, PSI evolved in a few short years from a somewhat controversial proposal by the U.S. President, to an activity grouping a small number of allied states, to one that is formally supported by 95 states spanning six continents. No less important, PSI has registered substantial success in actual interdictions and in improving partners' capabilities—political, diplomatic, legal, military—to prevent proliferation shipments from reaching their destinations. As discussed in the next chapter, however, there is both ample room to improve PSI and, even more urgent, a need for action to maintain its current momentum.

Origins of the Proliferation Security Initiative

On December 11, 2002, President George W. Bush published the *National Strategy to Combat Weapons of Mass Destruction*, promulgating the first comprehensive approach to prevent WMD and missile proliferation, protect against it, and mitigate to the extent possible the consequences of its use.⁴⁵ The first counterproliferation element mentioned in the strategy is interdiction: “Effective interdiction is a critical part of the U.S. strategy to combat WMD and their delivery means. We must enhance the capabilities of our military, intelligence, technical, and law enforcement communities to prevent the movement of WMD materials, technology, and expertise to hostile states and terrorist organizations.”⁴⁶ To strengthen the actual and perceived importance of interdiction, the Bush Administration reportedly also established a dedicated Interdiction Policy Coordination Committee (PCC).⁴⁷

⁴⁵ According to press reports, the unclassified strategy document is based on a classified September 2002 National Security Presidential Directive (NSPD). See, for example, *The Washington Times*, January 31, 2003.

⁴⁶ White House Office of the Press Secretary, *National Strategy to Combat Weapons of Mass Destruction*, December 2002, p. 2.

⁴⁷ Interview, June 2009. PCCs in the George W. Bush Administration were the Assistant Secretary-level groups involving all concerned agencies on separate regional and functional national security issues. Most proliferation issues fell under a single Proliferation Strategy (later Counterproliferation Strategy) PCC; it was unusual for a separate PCC to be devoted to just one proliferation subject. There is no publicly available information as to whether the Obama Administration has maintained a dedicated Assistant Secretary-level group (now called Interagency Policy Committee [IPC]) on interdiction.

Coincidentally and ironically, on the same day that the White House publicly rolled out the *National Strategy to Combat Weapons of Mass Destruction*, the United States and a key ally, Spain, experienced a dramatic interdiction failure.⁴⁸ The United States began tracking the North Korean vessel *So San* from the time it left North Korea, believing it was carrying SCUD missiles to “a potential terrorist nation.”⁴⁹ On December 9, a Spanish naval vessel interdicted the *So San* in the Arabian Sea, forcefully boarding it by helicopter when the ship’s captain refused to stop. The international legal basis for the interdiction was solid; the *So San* was in international waters and flew no flag, making it legally a stateless ship. The United States had asked the Spanish Navy to act once the *So San* entered the region patrolled by the multinational naval Taskforce 150, commanded at the time by Spain.

The Spanish, joined by U.S. naval personnel, found a major proliferation cache on board the *So San*, hidden under bags of cement: 15 complete SCUD missiles; 15 conventional warheads; 23 containers of nitric acid fuel; and 85 barrels of unidentified chemicals. The false cargo manifest simply added to the legal case for interdiction. Zbigniew Brzezinski, National Security Advisor to President Carter, was quoted in the press as describing the *So San* interdiction as a “completely appropriate and commendable action.”⁵⁰

The initial success of the *So San* interdiction, however, quickly unraveled, following media reports of the operation. The Yemeni Embassy in Washington earlier had stated that its government had not purchased or otherwise acquired SCUD missiles from North Korea. After the interdiction was publicized, the Yemeni Government reversed itself—strongly protesting that the SCUDs and related equipment were its property, ordered some time before the 2001 Yemeni assurance to the United States that they would no longer buy missiles from North Korea. A flurry of urgent conversations reportedly ensued, involving Vice President Cheney, Secretary of State Powell, Yemeni President Ali Abdullah Saleh and Foreign Minister Abubakr Qirbi. The outcome: the United States (which now controlled the ship) agreed to let it proceed to Yemen with its complete cargo.

The newly-established Interdiction PCC, led by National Security Council (NSC) staff, immediately undertook a “lessons learned” study of the *So San* affair, followed by initial proposed “rules of the road” for maritime interdictions. The White House then decided that the issue was sufficiently important and innovative in its approach to WMD and missile proliferation that it warranted a Presidential initiative. The result was the proposal made by President Bush in a speech in Krakow, Poland on May 31, 2003:

When weapons of mass destruction or their components are in transit, we must have the means and authority to seize them. So today I announce a new effort to fight proliferation called the Proliferation Security Initiative. The United States and a number of our close allies, including Poland, have begun working on new agreements to search planes and ships carrying suspect cargo and to seize illegal weapons or missile technologies. Over time, we will extend this partnership as broadly as possible to

⁴⁸ The discussion here of the *So San* interdiction and its aftermath is based heavily on: Brian Knowlton, “Ship Allowed to Take North Korea SCUDs on to Yemeni Port: US Frees Freighter Carrying Missiles,” *International Herald Tribune*, December 12, 2003; Robert Marquand and Peter Force, “The Unprecedented Seizure Monday of a Ship Carrying North Korean Missiles Highlights US Preemption Doctrine,” December 12, 2002 edition—<http://www.csmonitor.com>; and William Safire, “Bush’s Stumble: The *So San* Affair,” *The New York Times*, December 19, 2002.

⁴⁹ White House Spokesman Ari Fleischer, as quoted in Knowlton, *op. cit.*

⁵⁰ As quoted in Marquand and Force, *op. cit.*

keep the world's most destructive weapons away from our shores and out of the hands of our common enemies.⁵¹

Thus, President Bush proposed PSI less than six months after the *So San* events. Several key allies were informed of the PSI proposal shortly before the speech; all remain active PSI participants.⁵²

Establishment of the Proliferation Security Initiative

The 11 original members of PSI⁵³ began almost immediately to flesh out the Initiative. The task was given to Foreign Ministry Political Directors or the equivalent, who were well positioned to act quickly. All were senior officials with wide negotiating latitude and influence in their capitals, and most had a long history of working closely together in other bilateral and multilateral fora, such as the G-8 and European Union.⁵⁴ The U.S. delegation was headed by then-Under Secretary of State for Arms Control and International Security John R. Bolton.

The first meeting, fittingly hosted by the Government of Spain, took place in Madrid on June 12, 2003, less than two weeks after President Bush's Krakow speech. (This qualifies as blinding speed for any multilateral undertaking and testifies to the importance all participants placed on the Initiative.) The Chairman's Statement issued at the end of the meeting was general in tone and substance, but set the stage for what followed: "...building on the Proliferation Security Initiative announced by U.S. President Bush May 31 in Krakow, participants agreed on the need to take more active measures to stop the flow of WMD and missiles to and from states and non-state actors of proliferation concern." They also agreed that PSI should include "all countries that are prepared to play a role in preventing this dangerous commerce, and that can contribute to proactive measures to interdict shipments."⁵⁵

The next meeting took place four weeks later in Brisbane, Australia on 9-10 July 2003. The first sentence in the Chairman's Statement from that session mentioned that the "participants...underscored that the PSI is a global Initiative with global reach"—a point already made by the simple fact of the meeting's location. The Brisbane statement was much more detailed than its predecessor, demonstrating how far the participants had come toward making PSI a reality. It addressed such practical issues as: interdiction modalities in both information sharing and operations (mentioning for the first time land and air, as well as maritime, interdiction); the desirability of training exercises; and the need for broad membership, especially by flag, coastal and transit states. The statement also made clear that PSI would not supplant the existing nonproliferation regimes, but play an essential role in their enforcement:

The Brisbane meeting...emphasized that the increasingly aggressive and sophisticated efforts by proliferators to circumvent or thwart existing non-proliferation norms, and to profit from the trade of WMD and missiles or related items, requires new and stronger enforcement action by law-abiding

⁵¹ The White House, President George W. Bush, *Remarks by the President to the People of Poland, Wawel Royal Castle, Krakow, Poland*, Office of the Press Secretary, May 31, 2003, at <http://georgewbush-whitehouse.archives.gov/news/release/2003/05/print/20030531-3.html>.

⁵² Interview, December 2008.

⁵³ Australia, France, Germany, Italy, Japan, Netherlands, Poland, Portugal, Spain, the United Kingdom and the United States.

⁵⁴ Six of the 11 original PSI members are in the G-8; eight in the European Union; and nine in NATO (the remaining two are close bilateral allies of the United States).

⁵⁵ "Chairman's Statement at the First Meeting," at Appendix D. Appendix D includes the final statements from all the PSI political-level meetings, from June 2003 through May 2008.

nations. The PSI was therefore welcome as a necessary and innovative approach to the problem of countries which cheat on their international obligations, refuse to join existing regimes or do not follow international norms, and for non-state actors seeking to acquire WMD.⁵⁶

The third meeting, held in Paris on September 3-4, 2003, issued the Statement of Interdiction Principles, essentially the “constitution” of PSI.⁵⁷ Since that time, the single entry criterion for PSI membership or participation has been endorsement of the Statement of Interdiction Principles. The Statement may be without precedent in international affairs, and is certainly without precedent among the numerous prior agreements and arrangements against WMD and missile proliferation. The Statement is not legally binding and creates no new legal obligations; it stresses that implementation must be “consistent with national legal authorities and relevant international law and frameworks.” Nonetheless, whereas most international “statements” express general positions, the PSI Statement of Interdiction Principles is focused on action. The document expresses powerful political commitments by each participant to:

- “Undertake effective measures, either alone or in concert with other states, for interdicting” proliferation transfers;
- Streamline procedures for sharing information on suspected proliferation;
- Take specific action to: avoid proliferation from its own territory; interdict suspected proliferation shipments under its jurisdiction; “seriously consider” allowing others to board and search its flag vessels suspected of proliferation; interdict or deny overflight to suspected proliferant aircraft; inspect and seize any proliferation transshipment cargoes.

The “specific actions” in the Statement all concern those over which states have firmly-established authority under international law, primarily involving their national territory, territorial waters, or vessels flying their national flag. The Statement does not directly address the more difficult issue of interdiction outside of national jurisdiction, but does so indirectly in two ways. First, it stresses the possibility of interdiction action “at the request and good cause shown” by another state. In other words, one PSI participant with information on a suspected proliferation shipment might request action by another with legal authority to interdict. Second, and more generally, the first principle of the Statement simply calls for undertaking “effective measures” for interdiction—in order to cover all possible cases.

Further, the Statement calls for interdictions of WMD- and delivery system-related transfers “to and from states and non-state actors of proliferation concern.” It defines those broadly:

‘States or non-state actors of proliferation concern’ generally refers to those countries or entities that the PSI participants involved establish should be subject to interdiction activities because they are engaged in proliferation through: (1) efforts to develop or acquire chemical, biological, or nuclear weapons and associated delivery systems; or (2) transfers (either selling, receiving, or facilitating) of WMD, their delivery systems, or related materials.

In case there was any doubt that “actors of proliferation concern” had the broadest possible meaning, the Chairman’s Statement from the fourth PSI meeting a month later, made it crystal clear: “Participants agreed that the Initiative aimed to impede and stop trafficking of WMD, their delivery systems and related materials by any state or non-state actor engaged in or supporting WMD proliferation programmes, at any time and in any place.”⁵⁸

⁵⁶ “Chairman’s Statement at the Second Meeting,” at Appendix D.

⁵⁷ See Appendix E for the Statement of Interdiction Principles.

⁵⁸ “Chairman’s Conclusions at the Fourth Meeting,” at Appendix D.

While the “specific actions” refer only to maritime and air interdictions, the Chairman’s Statement from the Brisbane meeting mentioned land as well. In practice, PSI has addressed all three, but with more focus on maritime than on air, and more on air than on land.

Finally, as prefigured from the Brisbane meeting, the Statement of Interdiction Principles makes clear that all like-minded states are encouraged to participate. It calls “on all states concerned with this [proliferation] threat to international peace and security to join in similarly committing to” the Principles.

Proliferation Security Initiative in Action: Membership and Structure

Significant numbers of states responded quickly to the call to participate in PSI. The Chair of the fourth plenary meeting in October 2003, just one month after the issuance of the Statement of Interdiction Principles, reported that over 50 countries had announced support for PSI. The number steadily increased over the next few years: over 60 by the fifth plenary meeting in March 2004; over 75 by the high-level political meeting in June 2006; 91 by the fifth anniversary senior-level meeting in May 2008; and 95 by June 2009.⁵⁹ That breadth of support is a major success, greatly exceeding initial expectations. Unlike most prior nonproliferation efforts, this rapid expansion was achieved without a formal treaty or executive agreement, but instead by political agreement and public endorsement at the highest levels of government. At its most basic level, support for the PSI is an acknowledgement of the growing threat of WMD proliferation and the need for stronger measures to defeat proliferators through greater international cooperation.

Today, PSI supporters represent nearly half the total United Nations membership of 192 and span the globe. Nevertheless, the distribution remains uneven. European endorsement is near-universal (Monaco is the single exception). Notably, and as a result of a targeted U.S. diplomatic effort,⁶⁰ all former Soviet states in Central Asia subscribe to the Principles. Other regions—and especially Sub-Saharan Africa—are underrepresented. The specific regional breakdown of the current PSI supporters is as follows:

- Europe (including Russia)—48
- Western Hemisphere—10
- Near East–South Asia (including North Africa)—15
- Central Asia—5
- East Asia-Pacific—14
- Sub-Saharan Africa—3

The gaps in PSI participation remain a concern for several reasons. First, broader support would reinforce the normative power of the PSI principles, helping to establish them as a type of “international common law” against proliferation. This would add to the growing perception that endorsement of PSI is a standard of responsible nonproliferation behavior. Second, increased participation by less-developed states would help to erase any perception that proliferation is a have/have-not issue, with the five official Nuclear-Weapons States and their allies on the one side and the remaining states on the other. Third, as the A.Q. Khan nuclear proliferation network demonstrated, proliferators may operate anywhere, and naturally choose locations where they will be subject to less scrutiny.

Finally, the ranks of those who have not yet endorsed the PSI principles include several major states who play leading roles in international trade and/or have significant industries related to WMD and missiles.

⁵⁹ Past participation data as reported in the concluding statements at Appendix D. See Appendix F for the current participation list.

⁶⁰ Interview, May 2009.

Key examples include Brazil, China, Egypt, India, Indonesia, Malaysia, Pakistan and South Africa. Outreach to broaden PSI support continues. For example, 21 nonparticipating governments, including China, India and Pakistan, reportedly attended the second, outreach day of the May 2008 PSI fifth anniversary meeting in Washington.⁶¹

Of particular note, South Korea endorsed PSI on May 26, 2009—one day after North Korea's second nuclear weapons test. Before then, Seoul had participated quietly as an observer in some PSI activities, but refused to endorse formally the Initiative, reportedly out of a desire to avoid an adverse North Korean reaction. That calculus changed after the North Korean test, with South Korean Foreign Minister Yu telling his Parliament that PSI participation would help to control North Korea's nuclear development.⁶²

As discussed above, PSI participants urged "endorsement of the Statement of Interdiction Principles and participation in the PSI by all states that are committed to preventing the proliferation of WMD, their means of delivery, and related materials."⁶³ However, they also strove for participants' active involvement. The Chairman's Statement from the Fifth PSI Plenary Meeting (Lisbon, March 2004) expressed that aim in two different ways. First, it noted that participants "agreed to focus their outreach efforts particularly on states that have potentially unique contributions to make to interdiction efforts (i.e., flag states, transshipment states, overflight states, transit states, and coastal states)." Second, supporting countries were encouraged to consider the following practical steps that can establish the basis for involvement in PSI activities:

- Formally commit to and publicly endorse the PSI and its Statement of Interdiction Principles and indicate willingness to take all steps available to support PSI efforts.
- Undertake a review and provide information on current national legal authorities to undertake interdictions at sea, in the air or on land. Indicate willingness to strengthen authorities where appropriate.
- Identify specific national assets that might contribute to PSI efforts (e.g., information sharing, military and/or law enforcement assets).
- Provide points of contact for PSI interdiction requests and other operational activities. Establish appropriate internal government processes to coordinate PSI response efforts.
- Be willing to actively participate in PSI interdiction training exercises and actual operations as opportunities arise.
- Be willing to consider signing relevant agreements (e.g., boarding agreements) or to otherwise establish a concrete basis for cooperation with PSI efforts (e.g., MOU on overflight denial).⁶⁴

The definition of PSI support or participation has been somewhat controversial. Some observers argue that it is overly vague and does not require any active involvement in interdictions or other PSI activities.⁶⁵ In fact, there are significant differences among PSI supporters in the extent of their active involvement, based on political interest, counterproliferation capability and/or the interdiction requirements/opportunities they confront.

⁶¹ Wade Boese, "Interdiction Initiative Successes Assessed," *Arms Control Today*, Volume 38, July/August 2008.

⁶² Kurt Achin, "South Korea Counters North's Nuclear Test by Joining Arms Interdiction Initiative," *VOA News*, 26 May 2009. See also "South Korea Joins PSI, North Irate," *UPI.com*, May 27, 2009, http://www.upi.com/Top_News/2009/05/27/S-Korea-joins-PSI-North-irate/UPI-37271243404462/.

⁶³ "Washington Declaration for Fifth Anniversary Senior-Level Meeting," at Appendix D.

⁶⁴ "Chairman's Statement at the Fifth Meeting," Appendix D.

⁶⁵ See, for example, Mark J. Valencia, "The Proliferation Security Initiative: A Glass Half-Full," *Arms Control Today*, Vol. 37(5), June 2007.

In the period leading up to, and immediately after, the issuance of the Statement of Interdiction Principles, the 11 original participants constituted an informal “Core Group”⁶⁶ that set the basic policy direction of PSI. They were joined in early 2004 by Canada, Norway, Singapore and later Russia. As PSI support expanded, however, the Core Group concept became increasingly awkward and unworkable. Several new participants demanded inclusion or objected to the perception of second-class PSI membership. On the other hand, continued growth in the Core Group was seen to be counterproductive, making it too unwieldy for decisionmaking. As a result, the last Core Group meeting was in March 2004.

In the years since then, there have been only three political-level meetings, in June 2004, June 2006 and May 2008—all open to all PSI supporters, and all marking anniversaries of President Bush’s Krakow speech. Although those three sessions were more formal and ceremonial than the initial, smaller Core Group meetings between June 2003 and March 2004, they still had the important effects of reinforcing the global nature of PSI participation and of reaffirming and deepening the commitments supporters had made in endorsing the Statement of Interdiction Principles.

Regular meetings among PSI participants devolved after March 2004 to the Operational Experts Group (OEG). After initial growth, the OEG has remained stable at 20 participants: the original 11 states plus Argentina, Canada, Denmark, Greece, New Zealand, Norway, Russia, Singapore and Turkey. The members were chosen for their political significance, strong commitment to PSI, importance to international shipping, and/or regional distribution. Russia and Argentina joined the OEG largely because of the political and regional factors, respectively, and have been less active than other members.

The OEG first convened, as the Operational Experts Working Group (OEWG), on the margins of the political session at Brisbane in July 2003. The OEWG was one of several working groups of the PSI Core Group, rather than an autonomous entity. The group for the first time met separately from the Core Group—and began using the name OEG—in December 2003. One U.S. Government official who was closely involved in the initial activities of the OEWG and OEG describes the evolution from the one to the other as significant, because it “embodied the shift from the political focus of the Core Group to the operational, pragmatic, and results-oriented focus of the OEG.”⁶⁷

The OEG’s fundamental role has been to translate the PSI principles into capabilities and action: planning and conducting exercises; identifying capabilities and procedures required and available for interdictions, including legal bases; intelligence sharing; and sharing lessons learned from both successes and failures. The initial OEWG and OEG meetings were small, involving about 40 officials from the 11 original participants, almost exclusively from defense ministries.⁶⁸ In February 2004, President Bush called in a speech at the National Defense University (NDU) for expansion of PSI to law enforcement, to act directly against proliferators.⁶⁹ That proposal was immediately, and explicitly, endorsed at the fifth PSI plenary meeting in March:

⁶⁶ Although the phrase “Core Group” is used here, neither the phrase nor the concept ever had official standing.

⁶⁷ Personal communication, May 2009.

⁶⁸ Interviews, December 2008.

⁶⁹ “I propose that the work of the Proliferation Security Initiative be expanded to address more than shipments and transfers. Building on the tools we’ve developed to fight terrorists, we can take direct action against proliferation networks. We need greater cooperation not just among intelligence and military services, but in law enforcement, as well. PSI participants and other willing nations should use the Interpol and all other means to bring to justice those who traffic in deadly weapons, to shut down their laws, to seize their materials, to freeze their assets.” White House, Office of the Press Secretary, “President Announces New Measures to Counter the Threat of WMD: Remarks by the

Participants supported the call by U.S. President Bush to expand the role of the PSI to not only interdict shipments of WMD, their delivery systems and related materials, but to cooperate in preventing WMD proliferation facilitators (i.e., individuals, companies, and other entities) from engaging in this deadly trade. They also warmly welcomed contributions by other participants namely the UK. Participants agreed to pursue greater cooperation through military and intelligence services and law enforcement to shut down proliferation facilitators and bring them to justice.

PSI participants agree to begin examining the key steps necessary for this expanded role, including:

- identifying national points of contact and internal processes developed for this goal;
- developing and sharing national analyses of key proliferation actors and networks, their financing sources, and other support structures;
- undertaking national action to identify law enforcement authorities and other tools or assets that could be brought to bear against efforts to stop proliferation facilitators.⁷⁰

As a result, the OEG expanded to include break-out groups of intelligence and law enforcement experts. This was a particularly important development, given the crucial role of intelligence collection and sharing in interdiction, and of law enforcement in dealing effectively with both proliferators and their cargo.

More controversial has been the devolution over time of the leadership of about one-half the OEG delegations to foreign, rather than defense, ministries. Some observers view this as a welcome development, helping to ensure a tight link between PSI operations and overall policy against proliferation. Others believe it has reduced OEG effectiveness, because foreign ministries do not have their defense counterparts' ability to draw on national interdiction capabilities. Both sides agree that the change has resulted primarily from the end of regular PSI political meetings. Governments have turned to the OEG, as the only regularly-convening PSI forum, to discuss policy as well as operational issues.⁷¹

The OEG has met three-to-five times a year since the first meeting in July 2003, supplemented by a few regional meetings and workshops with industry and on specific issues.⁷² In order to encourage more active PSI involvement by non-OEG participants, the OEG now plans to meet less often in full session, and to arrange instead broad regional meetings chaired by OEG members. However, only one such session has been held thus far, and only one other has been planned. "Core Group" countries remain the most active in the OEG. Eighteen of the 25 OEG meetings and workshops held or currently planned have been, or will be, chaired by an original PSI member. The remaining seven were chaired by Canada (twice), Denmark, Greece, New Zealand, Norway and Singapore.

Chairs of the PSI plenary and OEG meetings are volunteers, identified at each previous meeting. There are no predetermined rules for chairmanship, or effort at rotation among all members, and no other PSI structure. As first stated in the Chairman's conclusions from the October 2004 plenary meeting, PSI is very much "an activity not an organization."⁷³

President on Weapons of Mass Destruction Proliferation, Fort Lesley J. McNair—National Defense University, Washington, D.C.," February 11, 2004.

⁷⁰ "Chairman's Statement at the Fifth Meeting," at Appendix D.

⁷¹ Interviews, December 2008.

⁷² See Appendix G for a list of the OEG meetings and workshops.

⁷³ "Chairman's Conclusions at the Fourth Meeting," at Appendix D.

Proliferation Security Initiative in Action—Building Capabilities

PSI participants, especially through the OEG, emphasized a vigorous interdiction exercise program from the very beginning—with the first maritime exercise conducted just one week after the Statement of Interdiction Principles was issued.⁷⁴ Exercises have been essential in improving both national interdiction capabilities, and the ability of partners to work together under different scenarios. They also assist outreach to non-PSI members, many of whom have participated as observers. Exercise participants and observers are almost never named publicly; while that encourages broad participation, it inhibits public understanding of PSI's reach and effectiveness.⁷⁵

Since PSI's inception, it has held 37 exercises (with three more planned through 2009). Most have been dedicated live exercises, but there have been several command post (CPX)—or table-top—exercises as well. Further, in recent years, PSI scenarios increasingly have been included, or “injected,” into regular regional exercises.

Each of those three forms has an important impact on participants' (and perhaps even on observers') capabilities. The dedicated live exercises focus on operational interdiction assets. The CPX help to develop and fine-tune interdiction information sharing and decisionmaking procedures. The injection of PSI scenarios into large regional exercises both take advantage of those exercises' resources and also encourage perception of counterproliferation as a core military mission. The majority of exercises have had a maritime focus, but a substantial number have concerned ground, air or port interdictions; several have combined some or all of those elements.

PSI military exercises are voluntary activities that help the armed forces of partner states work together in a more cooperative, coordinated, and effective manner to stop, search, and seize shipments. These exercises include detailed scenarios with designated role players and mock WMD cargoes. PSI partners practice sharing intelligence, developing operational plans, rehearsing tactical procedures, establishing command and control mechanisms, and actually boarding ships to discover illicit cargo. Similar scenarios and procedures are established for interdicting aircraft in the air or at airports, or tracking/stopping proliferators that are crossing international borders by ground. At all levels, from tactical units to senior uniformed and civilian officials, PSI military partners share or establish best practices and procedures to facilitate real-world operations.

PSI exercises have also been designed to promote greater involvement from national border control and customs agencies, including the Coast Guard. These are similar to PSI military exercises in design and purpose, but include a different set of tools, legal constraints, and policies particular to the participating agencies. Participants are called upon to think creatively about how they can combine their varying capabilities in synergistic ways to discover and seize shipments in a non-military manner.

Over the years, the pace of PSI exercises has slowed gradually, but noticeably: from four in the fourth quarter of 2003, to nine in 2004, to six each in 2005-2007, to five in 2008, and four planned for 2009. One reason may be a loss of momentum since the enthusiasm of the earlier period; another may be the

⁷⁴ See Appendix H for a list of PSI exercises.

⁷⁵ An Australian Government fact sheet about Exercise PACIFIC PROTECTOR 06 is typical in its description of national participation, naming a few states but leaving the majority anonymous: “Twenty PSI countries attended the exercise and an additional 15 countries participated in a concurrent PSI outreach program. ADF [Australia Defence Forces] and Customs personnel and assets participated in the exercise, as well as personnel and assets from Japan, NZ [New Zealand], Singapore, UK, and the US.” Australian Government, Department of Defence, “Proliferation Security Initiative: Exercise Pacific Protector 06 Overview,” <http://www.defence.gov.au/psi/expp06.htm>.

increasingly important role of foreign (rather than defense) ministries in the OEG; a third may be budget stringencies—a factor whose importance likely will increase in the near future given the global economic downturn.

On the other hand, there has been a significant increase over time in the number of exercises led by states that joined PSI after the Statement of Interdiction Principles was issued. In 2003 and 2004, all PSI exercises were led by original members. Thereafter, the number of exercise leaders or co-leaders broadened, as follows: the Czech Republic, Singapore and Norway (2005); Turkey, Denmark, Russia and Sweden (2006); Lithuania, Slovenia and Ukraine (2007); and Djibouti, Croatia and New Zealand (2008). Many of those exercises were hosted by two or more states, helping to pool resources and expertise. The leadership by the Czech Republic, Sweden, Lithuania, Slovenia, Ukraine, Djibouti and Croatia is particularly noteworthy, given that none of them participates in the OEG. Nevertheless, the bulk of PSI exercises continue to be led by original PSI members, and especially by the United States. Of the 37 held thus far, nine have been hosted by the United States, four by France (one co-hosted), three by Poland (two co-hosted), two each by Australia, Italy, Japan, Spain and the United Kingdom, and one each by Germany, Netherlands and Portugal. In addition, the United States will lead two of the three remaining exercises planned for 2009.

Proliferation Security Initiative in Action—Interdictions

One of the most important measures of PSI's actual impact is its record of successful interdictions. The issue is surprisingly controversial, in large part because relatively little public information is available on the subject, in order to protect sensitive information on intelligence and operational capabilities and procedures. Those releases that have occurred have noted significant interdiction successes, but have been partial and episodic. For example, in marking the second anniversary of PSI, then-Secretary of State Condoleezza Rice noted:

In the last nine months alone, the United States and ten of our PSI partners have quietly cooperated on 11 successful [interdiction] efforts. For example, PSI cooperation stopped the transshipment of material and equipment bound for ballistic missile programs in countries of concern, including Iran. PSI partners, working at times with others, have prevented Iran from procuring goods to support its missile and WMD programs, including its nuclear program. And bilateral PSI cooperation prevented the ballistic missile program in another region from receiving equipment used to produce propellant.⁷⁶

In a press briefing just before the PSI fifth anniversary meeting in May 2008, then-Acting Under Secretary of State John Rood provided both a very general update and an explanation for the absence of more specific information: "We literally had dozens of successful interdictions of items and technologies bound for countries of concern. We necessarily keep most of these successes confidential. We're sharing intelligence information among parties. In some cases, it's easier for countries to take action if the results will not be publicized."⁷⁷

⁷⁶ U.S. Department of State, Bureau of Public Affairs, *Remarks on the Second Anniversary of the Proliferation Security Initiative*, Secretary Condoleezza Rice, Benjamin Franklin Room, Washington, DC, May 31, 2005, at <http://2001-2009.state.gov/secretary/rm/2005/46951.htm>.

⁷⁷ U.S. Department of State, Bureau of Public Affairs, *Proliferation Security Initiative*, John Rood, Acting Under Secretary of State for Arms Control and International Security, Foreign Press Center Roundtable Briefing, Washington, DC, May 27, 2008, at <http://2002-2009-fpc.state.gov/105206.htm>.

More recently, a former senior U.S. Government official told the authors that PSI partners have conducted about 50 PSI interdictions. This official defined a “PSI interdiction” as one in which the participants made a conscious connection between the operation and the Initiative to which they belonged.⁷⁸

According to a press report, the United States provided more information on selected PSI interdictions to the fifth anniversary meeting in May 2008, and in a subsequent briefing to non-governmental organizations (NGOs):

February 2005: The United States tipped off a European government that one of its national entities was preparing to ship coolers to Iran that could be used in that country’s heavy-water reactor program. Heavy-water reactors have served as a key source of plutonium in the nuclear bomb efforts of India, Israel, and Pakistan. The European government investigated the claim and denied an export license for the coolers in accordance with a national law controlling such exports to Iran.

November 2006: The transfer of chromium-nickel steel plates to Iran by an Asian company was stopped in a third country. The steel plates, which reportedly could be used in missile components, were returned to the original supplier country. The interdicting state acted in accordance with UN Security Resolution 1696, which calls on states to prevent transfers of items to Iran that could contribute to its ballistic missile programs.

February 2007: Unspecified sources alerted port authorities in an unidentified state to a shipment destined for Syria of US-origin equipment that could be employed for testing ballistic missile components. Those authorities conducted an inspection, seized the equipment, and returned it to the United States. A foreign firm had served as the intermediary for the attempted Syrian purchase of eight vibration test systems and eight humidity chambers.

April 2007: A shipment of sodium perchlorate to Iran from an unspecified source was detoured to an Asian port, whose government then sent the shipment back to the country of origin. The sodium perchlorate, which can be used in making solid rocket propellant for ballistic missiles, was intended for an Iranian entity barred from receiving certain missile technologies by UN Security Council Resolution 1737.

June 2007: An unidentified country denied overflight rights to a Syrian plane scheduled to make a round-trip flight to North Korea. The denial stemmed from the United States sharing suspicions that the intended cargo was related to ballistic missiles. UN Security Council Resolution 1718 obligates countries to cooperate in preventing transfers of ballistic missiles and related technologies from North Korea. The Syrian flight did not occur.⁷⁹

The last example, of the cancelled Syrian flight, illustrates another difficulty in measuring PSI interdiction successes. Proliferators may be deterred or prevented from shipment by the prospect of interdiction or denial of transport means. Some argue that such instances cannot be termed successful interdictions because no physical action took place. The argument is reminiscent of Cold War debates about the efficacy of U.S.-Soviet deterrence. Only with hindsight, two decades after the end of the Cold War, is there broad consensus that deterrence succeeded because of what did *not* happen. The important point regarding such PSI actions as the June 2007 overflight denial is that they are PSI counterproliferation successes, regardless of whether one considers them to be actual interdictions.

⁷⁸ Interview, April 2009.

⁷⁹ Boese, *op. cit.*

Another source of controversy over PSI's interdiction record is that the Initiative did not arise and develop in a vacuum. As discussed earlier in this report, PSI participants are committed to a broad range of nonproliferation and counterproliferation commitments, from the NPT, BWC and CWC, through national and multilateral export control regimes, to the recent requirements of UNSC Resolutions to prevent Iranian and North Korean WMD- and missile-related trade. Moreover, many PSI participants are longstanding allies with well-established channels for intelligence sharing, diplomatic communications and active military cooperation. Although the *So San* incident in December 2002 demonstrated constraints on interdiction that PSI was designed in part to redress, it also showed close counterproliferation cooperation between the United States and Spain. As a result, and particularly in the absence of detailed intelligence and operational information about specific interdictions, PSI critics often argue that specific interdiction operations would have occurred without PSI and cannot be termed a success for the Initiative.

Differences over PSI interdiction achievements also arise over another, closely-related factor: the informal, "activity not an organization," nature of the Initiative. There is no PSI Secretariat to identify a proliferation shipment, no body of PSI members to vote for interdiction. Instead, one or a few PSI participants agree among themselves on the need and modalities for an interdiction. As one government official phrased it, PSI interdictions are "multinational, not multilateral."⁸⁰ For example, State A will receive intelligence information about a shipment and act against it if it has the operational and legal capability to do so, or alert States B and C if they are better placed to act. Again, critics argue that such interdictions cannot be credited to PSI. Here, too, they miss the basic point: PSI is designed to encourage and facilitate counterproliferation capacities and activities, by raising threat awareness and building on, rather than supplanting, existing national and multinational capabilities and cooperative channels.

Further, the Statement of Interdiction Principles is very clear that interdictions may occur only as permitted by existing national and international laws. Thus, the Statement includes a commitment to "[t]ake specific actions in support of interdiction efforts regarding cargoes of WMD, their delivery systems, or related materials, to the extent their national legal authorities permit and consistent with their obligations under international law and frameworks" (emphasis added). The Statement further calls for PSI participants to "[r]eview and work to strengthen their relevant national legal authorities where necessary to accomplish [PSI] objectives, and work to strengthen when necessary relevant international laws and frameworks in appropriate ways to support these commitments."

The best-known PSI interdiction was both the first and the one with the most profound counterproliferation impact. In early October 2003, just a few weeks after the issuance of the Statement of Interdiction Principles, the United States and United Kingdom approached Germany and Italy regarding a shipment of nuclear centrifuge components destined for Libya. The supplier was A.Q. Khan, whose network had manufactured the components at a clandestine factory in Malaysia and transshipped them through the United Arab Emirates. The carrier was the *BBC China*, a German-flagged vessel, giving the German Government authority to board and search it (or to allow others to do so). Germany and Italy readily agreed to the interdiction—immediately citing their responsibilities under PSI. After the ship passed through the Suez Canal, the United States, United Kingdom, Germany and Italy worked together to divert it to a port in Italy. The consequent exposure of Libya's nuclear weapons program and unraveling of the A.Q. Khan network was a major factor contributing to Libya's decision two months later, in December 2003, to abandon its WMD and longer-range missile programs.⁸¹ As one U.S. official has noted, the *BBC China* interdiction was an excellent example of the complementary, reinforcing nature of the PSI and

⁸⁰ Interview, December 2008.

⁸¹ Robert G. Joseph, *Countering WMD: The Libyan Experience*, Fairfax, VA (National Institute Press), especially pp. 40-41. President George W. Bush gave the first official public description of the *BBC China* interdiction in his February 12, 2004 speech at NDU, previously cited.

traditional nonproliferation agreements; in carrying it out, the United States, United Kingdom, Germany and Italy were both implementing their commitments under the PSI Statement of Interdiction Principles and enforcing the NPT and IAEA safeguards.⁸²

Many outside observers have hailed the *BBC China* interdiction as “[a]mong the PSI’s most notable successes.”⁸³ Some, however, maintained for the reasons described above that the *BBC China* interdiction was not a PSI operation. In arguing that “the Libya interdiction did not occur because of PSI,” one observer noted that “Germany, as well as other countries, had stopped proliferation in transit prior to PSI’s launch,” adding that “[t]he Initiative does not legally empower or obligate countries to do anything that they previously could not do.”⁸⁴ This argument, however, ignores both PSI’s stated reliance on existing national and international legal frameworks and, most notably, PSI’s objective of motivating states to respond to proliferation proactively through the disruption of related transfers.

It is difficult to say whether the *BBC China* interdiction would or would not have occurred without PSI. However, it is clear that PSI was an important facilitator, and helped to ensure that it happened as quickly, smoothly and effectively as possible. In particular, PSI enhanced the participants’ awareness of the proliferation threat and their commitment to take action against it. One German official has noted that his Government did not engage in any particular decision process about whether and how to respond to the U.S. and UK request to divert the *BBC China*; instead, German officials noted that they had just committed, in the Statement of Interdiction Principles, to precisely that type of action.⁸⁵ As one former senior U.S. Government official stated to the authors: “True, much of the collaboration was built on existing bilateral channels, but the PSI provided a critical international diplomatic framework and an example for future collaborative opportunities with other PSI adherents.”⁸⁶

Proliferation Security Initiative in Action—Legal Frameworks

PSI states have taken several steps to expand the legal bases for stopping proliferation and prosecuting proliferators. The issue is particularly important as proliferators adapt to PSI, ending practices that make them legally vulnerable to interdictions such as use of stateless vessels, stopping at PSI member ports or sailing in their territorial waters.

Some PSI participants—Singapore is a prime example—have strengthened their national laws against proliferation. In addition, OEG members share information about relevant national authorities, assisting rapid identification of a state that would have interdiction authority in a given proliferation case.⁸⁷

On enforcement, PSI members also draw on guidance by the Financial Action Task Force (FATF) relevant to preventing proliferation financing.⁸⁸ Established in 1989 to develop national and international standards and policies against money laundering (primarily to counter drug trafficking), the FATF explicitly

⁸² Interview, December 2008.

⁸³ Eben Kaplan, “Preventing Ballistic Surprises,” *Council on Foreign Relations Daily Analysis*, July 10, 2006.

⁸⁴ Wade Boese, “Key U.S. Interdiction Initiative Claim Misrepresented,” *Arms Control Today*, Vol. 35, July-August 2005.

⁸⁵ Interview, January 2009.

⁸⁶ Personal Communication, February 2009.

⁸⁷ Interviews, December 2008.

⁸⁸ “Washington Declaration for Fifth Anniversary Senior-Level Meeting,” at Appendix D.

expanded its focus in 2001 to address terrorist financing. Although the FATF has been slow to consider action against proliferation financing, many of its existing recommendations and standards apply to WMD and missile proliferation. Most of the 32 FATF state members are also PSI participants; the two most important exceptions are Brazil and China. Another PSI non-participant, India, is a FATF observer. All PSI OEG members except Poland belong to the FATF.⁸⁹

The legal basis for stopping and prosecuting proliferation would also be strengthened with the entry into force of, and wide adherence to, the amended Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA) and its 2005 Protocol. The original SUA Convention was completed in 1988 and entered into force in 1992; 152 states now adhere to it. The 2005 Protocol would make it unlawful knowingly to transport on board ships WMD or materials, equipment or technology destined for WMD; nuclear material and equipment is excepted if the transport is permitted under the NPT and IAEA safeguards. In addition, the Protocol covers procedures for boarding a ship reasonably suspected of violating, or about to be violating, the Convention; however, boarding requires flag state consent.⁹⁰ The amended SUA will enter into force upon ratification by 12 states, and the Protocol thereafter (provided three parties to the amended SUA also adhere to the Protocol). Thus far, only eight states have ratified the amended SUA and only six the Protocol.⁹¹

The Government of Australia has proposed that the International Civil Aviation Organization (ICAO) negotiate a similar WMD-related amendment to the 1971 Montreal Convention.⁹² In addition, the ICAO Aviation Security and Facilitation Policy Section cooperates and coordinates with other United Nations agencies and international organizations on standards, regulations and guidance to help combat terrorism⁹³—work which may also be applicable to WMD and missile proliferation. The PSI Fifth Anniversary meeting noted with approval “[t]he efforts of the International Civil Aviation Organization to consider criminalizing the illicit international transport by air of WMD, their means of delivery, and related materials, so as to prevent and impede WMD proliferation-related trafficking by air.”⁹⁴

The United States initially discussed the possibility of ship-boarding agreements with PSI partners at the London meeting in October 2003.⁹⁵ On February 11, 2004, the United States signed the first agreement with Liberia, which has the world’s second largest ship registry. Three months later, on May 12, 2004, the United States signed a similar agreement with Panama, which has the world’s largest ship registry. Since then, agreements have been signed with several other leading flag states: the Bahamas, Belize, Croatia, Cyprus, Malta, Marshall Islands, and Mongolia. Although all the signatories are PSI participants, the agreements facilitate rapid action by detailing procedures to board and search ships flying their flags that are suspected of carrying proliferation cargo. In that regard, the agreements may be particularly

⁸⁹ See Appendix I for a comparison of the memberships of PSI, FATF and the Global Initiative to Combat Nuclear Terrorism. Also see Chapter 5 for a fuller discussion of FATF history and activities.

⁹⁰ International Maritime Organization, International Conference on the Revision of the SUA Treaties, *Adoption of the Final Act and any Instruments, Recommendations and Resolutions Resulting from the Work of the Conference: Protocol of 2005 to the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation*, LEG/CONF.15/21, November 1, 2005.

⁹¹ *Summary of Status of Conventions as at 31 May 2009*, at <http://www.imo.org>.

⁹² Michael Kourteff, “Status of the Proliferation Security Initiative,” *United States-Morocco International Transshipment Conference, Tangiers, Morocco, 20 to 22 May 2008, Day 1—Plenary*, p. 3.

⁹³ “ICAO Aviation Safety, Security and Facilitation Website,” <http://www.icao.int/atb/avsec>.

⁹⁴ “Washington Declaration for Fifth Anniversary Senior-Level Meeting,” at Appendix D.

⁹⁵ “Chairman’s Conclusions at the Fourth Meeting,” at Appendix D.

important because none of the states with whom the United States has completed boarding agreements is a member of the OEG. They also call for rapid response, for example, by providing for an official response within two hours to a request from the other party to board the suspect vessel. Further agreements with other flag states would be useful.⁹⁶

As described by the U.S. Department of State, the nine ship-boarding agreements signed thus far:

provid[e] authority on a bilateral basis to board sea vessels suspected of carrying out illicit shipments of weapons of mass destruction, their delivery systems, or related materials. These agreements will facilitate bilateral cooperation to prevent such shipments by establishing procedures to board and search such vessels in international waters. Under the agreements, if a vessel registered in the U.S. or the partner country is suspected of carrying proliferation-related cargo, either one of the Parties to this agreement can request of the other to confirm the nationality of the ship in question and, if needed, authorize the boarding, search, and possible detention of the vessel and its cargo. These agreements are important steps in further operationalizing the Proliferation Security Initiative and strengthening the mechanisms that we have at our disposal to interdict suspect weapons of mass destruction-related cargoes. They are modeled after similar arrangements that exist in the counter-narcotics arena.⁹⁷

Conclusion

The events of the last two decades have brought into sharp relief the ingenuity of proliferators and the changing face of those willing to develop and use WMD. These phenomena are reflected in the personages of A.Q. Khan and Osama bin Laden, and in capitals from Pyongyang to Damascus.

The challenge for current and future administrations is to look “over the horizon” to the next set of proliferation challenges and threats. Success must be defined as preventing the next WMD-related event, not reacting to it after the fact. That means not only tightening the nonproliferation nooses even more; it also means that current gaps must be filled and loopholes closed in today’s nonproliferation architecture. This is exactly what PSI aspires to accomplish, and what the example of Libya’s disarmament proved is achievable.

PSI partners must remain innovative, agile and adaptable while continuing to expand the number of international supporters and to foster new capabilities across the full spectrum of available counterproliferation options. They must also continue to strengthen interdiction as a new norm of acceptable international behavior. All of this is critically important given the horrendous consequences that the proliferation of WMD presents to the civilized world.

⁹⁶ The following states have flags of convenience: Antigua and Barbuda, Aruba (NL), Bahamas, Barbados, Belize, Bermuda (UK), Burma, Cambodia, Canary Islands (Spain), Cayman Islands (UK), Cook Islands (NZ), Cyprus, German International Ship Register (GIS), Gibraltar (UK), Honduras, Lebanon, Liberia, Luxembourg, Malta, Marshall Islands (US), Mauritius, Netherlands Antilles, Panama, St. Vincent, Sri Lanka, Tuvalu, Vanuatu.

⁹⁷ U.S. Department of State, “Ship Boarding Agreements,” <http://www.state.gov/t/isn/c277333.htm>.

Chapter 4

Enhancing the Proliferation Security Initiative

Introduction

Any policy, program or initiative can always be improved. Policymakers and implementers must continually identify existing weaknesses and develop strategies either to remedy or work around them. In some cases, however, what one observer regards as a weakness, another considers a strength. All of this is true for the Proliferation Security Initiative.

Proponents of the PSI often cite its most well-known attributes as also its strongest: flexibility; voluntary nature; absence of bureaucracy; and comprehensive scope. Skeptics identify PSI's lack of formal agreement and structure, insufficient legal framework, and limited membership as shortcomings. Most PSI supporters believe the Initiative has been extremely successful, with potential for even greater achievement; most PSI skeptics consider the Initiative to be marginally successful. But with most experts readily acknowledging PSI as a constructive and important innovation, the challenge is to identify its strengths and weaknesses, develop plans to bolster the former and remedy the latter, and to do so in a manner that reinforces, not undermines, existing nonproliferation programs.

The Changing Proliferation Environment

All current and former U.S. and foreign officials interviewed for this study noted that PSI has had a powerful impact in deterring proliferation. In this view, PSI has changed the cost-benefit calculus of many proliferators, leading them in some cases to abandon, or at least curtail, their deadly trade. However, other proliferators—or sometimes the same ones after a period of adjustment—have taken the opposite tack, adopting increasingly sophisticated measures to evade PSI interdiction. For example:

- **Shipping Practices.** Proliferators increasingly plan routes and activities that do not trigger international and national laws that allow interdictions. Thus, they are staying away from the national waters and ports of PSI partners. They are careful to fly state flags and try to avoid shipping on carriers registered in PSI partner states or in countries that have signed boarding agreements with the United States.
- **Air Transit.** Proliferators increasingly ship their most sensitive cargoes by air rather than sea. Doing so makes interdiction more difficult, given the great challenges of stopping aircraft en route, including the short times available to discover and act against air transits before they arrive at their final destination.
- **Expanded Networks.** Proliferators are shipping to other proliferators, making proliferation networks more complex, opaque, and resilient. These networks are often supported by front companies and other dubious, interconnected organizations that facilitate shipments. Sometimes, legitimate business operations are used unwittingly in the proliferation trade, such as through false manifesting.
- **Technology.** From laptop computers and the Internet, to satellite communications and commercial overhead imagery, proliferators are constantly adapting the latest technologies to evade detection and ensure shipment and delivery.

PSI has already adapted to some of these changes. For example, the greater involvement of law enforcement and customs control agencies in the OEG and in training exercises helps to address proliferators' use of networks, front companies, international financial institutions and the like. However, the requirement to stay ahead of the proliferators requires constant adaptations and sharpening of all counterproliferation tools, from diplomacy to intelligence to law enforcement to military operations. Existing tools must be more fully refined and employed, and new ones developed.

In doing so, PSI participants must also maintain their own momentum and emphasis on the Initiative and its mission. It will be critical to avoid any risk of routinization or reduction of involvement as the years go by. Successor governments in PSI participating states must reaffirm their commitment to the Initiative—as the Rudd Government did in Australia when it came to power in December 2007—to reinforce that PSI engages the entire international community, beyond politics.

Especially important in that regard have been the early and strong signals from President Obama that his Administration is fully committed to PSI and its enhancement. The President endorsed PSI in his first major speech on proliferation and arms reduction, in Prague on April 5, 2009: “We must also build on our efforts to break up black markets, detect and intercept materials in transit, and use financial tools to disrupt this dangerous trade. Because this threat will be lasting, we should come together to turn efforts such as the Proliferation Security Initiative and the Global Initiative to Combat Nuclear Terrorism into durable international institutions.”⁹⁸

The next day, Deputy Secretary of State James Steinberg explicitly expanded on the President's speech in his keynote address to the Carnegie Endowment annual nonproliferation conference.⁹⁹ The Deputy Secretary reiterated strong U.S. support for PSI and the President's call for some institutionalization of the Initiative. It remained unclear whether that institutionalization would involve simply improved coordination or a more elaborate central structure, but the Deputy Secretary appeared to suggest a light approach:

We should strengthen the Proliferation Security Initiative, especially in the use of financial and other tools to disrupt and eradicate illicit networks. And we should use the Global Initiative to Combat Nuclear Terrorism, to help participating states build their domestic capacity to reduce the threat posed by terrorists who are seeking nuclear weapons, materials, and technology.

Both PSI and the Global Initiative have been run so far on a highly informal and decentralized basis and could benefit from having small central mechanisms to help coordinate their activities.¹⁰⁰

The implication that the Obama Administration did not intend any bureaucratization of PSI appeared to be realized at the May 12-14, 2009 Global and Western Hemisphere OEG and Outreach Meeting, at which the United States successfully proposed the designation of a PSI focal point.¹⁰¹ Administration officials

⁹⁸ The White House, Office of the Press Secretary, *Remarks by President Barack Obama, Hradcany Square, Prague, Czech Republic*, For Immediate Release, April 5, 2009, at http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered.html.

⁹⁹ “It's...an easy task to be here in light of the president's speech on Sunday because he really did set the tone, and it allows me to be able to come here and to say a little bit more in detail about where the president seeks to go and what our objectives are over the coming years, but broadly within the framework that he set out.” Carnegie International Nonproliferation Conference, Deputy Secretary of State James B. Steinberg, Monday, April 6, 2009, *Transcript by Federal News Service, Washington, D.C.*, at <http://www.carnegieendowment.org/events/nppcon2009>.

¹⁰⁰ *Ibid.*

¹⁰¹ See below for a fuller discussion of this development.

have indicated that this development fulfills the goal set in the Prague speech to make PSI a “durable international institution.”¹⁰²

The Obama Administration has continued to highlight its strong and high-level support for PSI. In remarks prepared for the OEG meeting on May 12, 2009, Gary Samore, Special Assistant to the President and White House Coordinator for Arms Control and Weapons of Mass Destruction and Terrorism, reportedly said:

President Obama has pledged to seek the peace and security of a world without nuclear weapons. ... However, we cannot achieve this objective if, while we are seeking to rid ourselves of nuclear weapons and other forms of weapons of mass destruction, others are pursuing their acquisition with equal if not greater vigor. It is for this reason that the Proliferation Security Initiative (PSI) remains a critical component of international nonproliferation policy.¹⁰³

Further, President Obama has personally and visibly supported specific PSI developments in unprecedented fashion. Although it was not issued publicly, the President reportedly wrote to the May 2009 OEG meeting; several delegations mentioned to U.S. representatives the importance they placed on the President’s letter.¹⁰⁴ Moreover, the White House issued a press statement on May 26, 2009, in which the President publicly welcomed South Korea’s participation in PSI.¹⁰⁵ Another White House press statement noted that the President personally thanked South Korea President Lee Myung-bak for the PSI decision.¹⁰⁶ The Bush Administration had not issued comparable releases regarding PSI membership. Finally, after North Korea’s second nuclear test, the Obama Administration reportedly pressed hard—and with some success—for UNSC authorization of interdictions against suspect shipments to and from North Korea.

Membership

In the few years since its inception, PSI and its Statement of Interdiction Principles have gained wide acceptance, consistent with international norms against proliferation. The members of the High-Level Panel on Threats, Challenges and Change, established in late 2003 by then-UN Secretary General Kofi Annan, represented a broad spectrum of views and countries,¹⁰⁷ and strongly supported PSI in their December 2004 report: “Recent activities of the A.Q. Khan network have demonstrated the need for and

¹⁰² Interview, June 2009.

¹⁰³ United States Southern Command News Release, “34 nations meet in Miami to discuss WMD trafficking prevention,” May 13, 2009.

¹⁰⁴ Interview, June 2009.

¹⁰⁵ The White House, Office of the Press Secretary, *Statement by the Press Secretary on the Republic of Korea’s Endorsement of the Proliferation Security Initiative*, May 26, 2009, at http://www.whitehouse.gov/the_press_office/Statement-by-the-Press-Secretary-on-the-Republic-of-Korea-Endorsement-of-the-Proliferation-Security-Initiative.

¹⁰⁶ The White House, Office of the Press Secretary, *Readout of the President’s Call with Republic of Korea President Lee Myung-bak*, May 25, 2009, at http://www.whitehouse.gov/the_press_office/Readout-of-the-Presidents-Call-with-Republic-of-Korea-President-Lee-Myung-bak.

¹⁰⁷ The members of the High-Level Panel were: Anand Panyarachun (Thailand, Chair); Robert Badinter (France); Joao Baena Soares (Brazil); Gro Harlem Brundtland (Norway); Mary Chinery Hesse (Ghana); Gareth Evans (Australia); David Hannay (United Kingdom); Enrique Iglesias (Uruguay); Amre Moussa (Egypt); Satish Nambiar (India); Sadako Ogata (Japan); Yevgeny Primakov (Russia); Qian Qiqian (China); Salim Salim (Tanzania); Nafis Sadik (Pakistan); and Brent Scowcroft (United States).

the value of measures taken to interdict the illicit and clandestine trade in components for nuclear programmes. This problem is currently being addressed on a voluntary basis by the Proliferation Security Initiative. We believe that all States should be encouraged to join this voluntary Initiative.”¹⁰⁸

In March 2005, Kofi Annan also supported PSI, in a major speech outlining a proposed “Global Strategy for Fighting Terrorism”:

...denying terrorists the means to carry out their attacks...means making it difficult for them to travel, to receive financial support, or to acquire nuclear or radiological material. ... Nuclear terrorism is still often treated as science fiction. I wish it were. ... That such an attack has not yet happened is no excuse for complacency. Rather it gives us a last chance to take effective preventive action. That means consolidating, securing, and when possible eliminating potentially hazardous materials, and implementing effective export controls. ... And I applaud the efforts of the Proliferation Security Initiative to fill a gap in our defenses.¹⁰⁹

The most important evidence of the global acceptance of PSI is, of course, the explicit endorsement of the PSI Statement of Interdiction Principles by, as of this writing, 95 states. Although that is an extraordinary achievement, both the quantity and quality of PSI membership must be enhanced.

First, as mentioned above, several key states remain outside the Initiative. Brazil, China, Egypt, India, Indonesia, Malaysia, Pakistan and South Africa are the most important in terms of political and economic influence, standing in international trade, geography, and/or WMD- and missile-related activities. PSI participants should continue to urge these states to join the Initiative, emphasizing that the broad support for the Statement of Interdiction Principles has already established it as a basic norm, and standard of good nonproliferation behavior, for the international community.

At the same time, it is more important to win these states’ cooperation in specific and general actions against WMD and missile proliferation than it is to secure their explicit support for PSI; their failure thus far to endorse the Initiative should not be perceived or portrayed as foreclosing joint counterproliferation work. In all those respects, it will be important for non-members to continue to be invited to observe PSI exercises. By the same token, it would be counterproductive for the United States to condition foreign or military assistance directly on a state’s participation in PSI. However, the United States should use existing assistance channels and programs both to encourage PSI membership and to help enhance states’ counterproliferation awareness and capabilities.

PSI partners should also seek to expand participation in the most seriously underrepresented regions: Sub-Saharan Africa and South America. The May 2009 Western Hemisphere outreach meeting may help with the latter. Africa will be more difficult; its poor record with IAEA safeguards agreements demonstrates the low priority that many Sub-Saharan countries place on WMD and missile proliferation issues. While neither South America nor Sub-Saharan Africa now appears a region of proliferation concern, the history of the A.Q. Khan network illustrates that proliferators prefer to operate in countries where they will receive little scrutiny. Drug traffickers increasingly transport their cargoes through Sub-Saharan Africa because of its poor security; proliferators might choose to emulate them. Further, East Africa lies along shipping routes between Asia and the Near East—routes that may become more

¹⁰⁸ United Nations, *A More Secure World: Our Shared Responsibility, Report of the Secretary General’s High-level Panel on Threats, Challenges and Change*, 2004, p. 45.

¹⁰⁹ The Secretary-General, United Nations, “Keynote address to the Closing Plenary of the International Summit on Democracy, Terrorism and Security,” Madrid, March 10, 2005, at <http://summit.clubmadrid.org/keynotes/a-global-strategy-for-fighting-terrorism.html>.

attractive to proliferators in their effort to evade PSI operations. Finally, several pathogens cited as Category A bioterrorism agents by the U.S. Centers for Disease Control and Prevention (CDC) are endemic in Africa, increasing the risk of BW proliferation from the continent.¹¹⁰

In addition, to retain and build its effectiveness, PSI will require both a reinvigoration of the activism of the members of the former “Core Group” and increased participation by other partners. The trend toward fewer annual exercises should be reversed. States that have been active in PSI from the beginning should be encouraged to maintain—or regain—their original momentum. Other leading states that endorse PSI but have not been active participants should be urged to expand their PSI-related activities. Russia, Argentina, Saudi Arabia and other Gulf States are prime examples.

PSI partners should also give far more attention than previously to building counterproliferation capacity among members that require it.¹¹¹ To the extent possible, PSI exercises should involve a mix of highly-capable members and others who require substantial improvements to their counterproliferation capabilities, to maximize the breadth and learning aspects of the exercises. As U.S. threat reduction and nonproliferation assistance programs, and the G-8 Global Partnership, focus increasingly on addressing global threats, they should fund capabilities and exercise participation by PSI partners who require such help. In its 2009 report, the National Academy of Sciences Committee on Strengthening and Expanding the Department of Defense Cooperative Threat Reduction Program found that an expanded, global CTR could be used to support PSI, as well as other international security efforts.¹¹² Further, the leading PSI states should look to expand and improve their PSI capabilities through vigorous research and development programs, for example, on improved WMD sensors and on stand-off nuclear detection in particular.

All of these recommended improvements regarding PSI membership will require strong U.S. leadership. Potential future participants, currently active members, and currently passive members will all continue to look to the Obama Administration for signals about the importance that it places on PSI. Non-members will not join, activists will not keep up momentum, and less active participants will not step up their activity unless the United States consistently emphasizes that PSI remains a priority. Strong U.S. encouragement will not guarantee broader and more active PSI participation, but it is a fundamental requirement for that to occur.

¹¹⁰ The Category A Bioterrorism Agents/Diseases are anthrax, botulism, plague, smallpox, tularemia and viral hemorrhagic fevers. CDC defines Category A as “organisms that pose a risk to national security because they: can be easily disseminated or transmitted from person to person; result in high mortality rates and have the potential for major public health impact; might cause public panic and social disruption; and require special action for public health preparedness.” <http://www.bt.cdc.gov/agent/agentlist-category.asp>.

¹¹¹ One former senior U.S. Government official has identified shortfalls in partner capacity-building as an important area in which PSI has thus far failed to fulfill its promise. Interview, February 2009.

¹¹² Committee on Strengthening and Expanding the Department of Defense Cooperative Threat Reduction Program, Committee on International Security and Arms Control Policy and Global Affairs, National Academy of Sciences, *Global Security Engagement: A New Model for Cooperative Threat Reduction*, Washington, DC (The National Academies Press), 2009, p. 70. This change was also recommended in Ashton B. Carter and Robert G. Joseph, *Review Panel on Future Directions for Defense Threat Reduction Agency Missions and Capabilities to Combat Weapons of Mass Destruction: Report, March 2008*. Available at http://belfercenter.ksg.harvard.edu/publication/18307/review_panel_on_future_directions_for_defense_threat_reduction_agency_capabilities_to_combat_weapons_of_mass_destruction.html.

Structure

Some observers believe that PSI would be strengthened substantially if it acquired a formal organization, perhaps embedded in the United Nations, that would “assess intelligence, coordinate and fund activities, and make recommendations or decisions regarding specific or generic interdictions.”¹¹³ The IAEA Board of Governors and UNSC histories regarding North Korea and Iran amply demonstrate why such a change would be completely counterproductive. Instead of strengthening PSI, any structure requiring formal multilateral decisions before taking action against proliferation shipments would almost certainly guarantee inaction. Such a traditional, formal structure would severely undermine, if not destroy, PSI.

Although PSI must retain its basic character as “an activity, not an organization,” its structure could still be strengthened in several ways. First, the OEG’s plan to focus increasingly on regional meetings involving non-OEG members is sound. However, the fact that only one such meeting has occurred (in the Western Hemisphere) and only one is now planned (in Europe) is cause for concern. Members should be pressed to ensure an OEG meeting in each major region at least once every two years, and once a year if possible.

To facilitate that outcome, consideration should be given to broadening OEG membership to provide adequate regional representation. For example, Turkey is currently the only OEG member from the Near East-South Asia, Argentina the only one from South America, and no African state belongs to the group. South Korea, Saudi Arabia, and the UAE would be useful additions. So too, if they decided to endorse PSI, would be Brazil, China, Egypt, India, Indonesia, Malaysia, Pakistan and South Africa. The political standing and importance to world trade of these states would require that they be included in the OEG if they join PSI. While some (especially China and Pakistan) have questionable proliferation records, having them inside the PSI tent rather than outside might help to improve their behavior. In any case, the informal character of PSI ensures that no member could ever veto counterproliferation action by another.

If all those states joined the OEG, it would still total only about 30—a manageable size, especially considering the benefits of wider representation and the prospect of a more regional focus to the group. However, it will remain necessary for the OEG to meet in full session at least once a year, in view of the global nature of the proliferation problem and the transregional character of the vast majority of proliferation shipments. Thus far, relatively few OEG members have chaired meetings;¹¹⁴ several have indicated that they believe others should share the financial and time burdens of chairmanship before they do so again.¹¹⁵

In an important step, OEG participants agreed in May 2009 to designate a single government as the group’s PSI focal point, with the United States as the first one. The focal point would support all PSI members, not just OEG participants. Although the concept is still being fleshed out, the focal point would work closely with the current and next OEG chair.

If necessary or desirable, that could evolve over time into a rotating annual chairmanship, such as used by the G-8, although such an arrangement would raise the risk of a weak chair. Perhaps the best approach might be a “troika” of the current, preceding, and succeeding chairs—enhancing the chairmanship’s resources, expertise and experience. Creation of a very small secretariat to ensure

¹¹³ Valencia, *op. cit.*

¹¹⁴ See list of OEG meetings and chairs at Appendix G.

¹¹⁵ Interview, December 2008.

information flow might also be possible; however, any such change would have to be approached with caution, given the importance of avoiding bureaucratization of the PSI effort.

PSI should also restore regular high-level policy meetings. Those seem very important to maintain strong political-level support for the Initiative, which in turn is critical to its momentum and sense of partnership. The change also would be important to return the OEG to the operators, reversing the recent trend toward more OEG leadership by foreign ministries. Plenary meetings of 90+ states would inevitably be heavily ceremonial, in contrast to the working nature of the high-level sessions leading to, and immediately following, the Statement of Interdiction Principles. Consideration might be given to one annual plenary, and at least one annual policy meeting in each region. Such meetings must not entail any change in PSI decisionmaking processes, and care must be taken to guard against their becoming another multilateral “talk-shop.” Actions would remain voluntary, votes would not be taken, consensus would not be required except perhaps on such procedural issues as meeting chairmanship. The purpose of the meetings would be to facilitate and encourage, not to substitute for, action.

Information Sharing and Analysis

Another area in which PSI can and should be made more effective is information sharing, both among partners and with the public.

In the OEG break-out groups on intelligence, experts discuss more efficient and effective ways to collect, share and assess intelligence within the constraints of national laws and policies. These procedures can help intelligence agencies provide policymakers better and more timely intelligence upon which to act. These fora also introduce intelligence personnel to one another in a cooperative environment that helps build the trust, confidence and relationships that are critical when a real-world proliferation incident is discovered. Similar exchanges occur among law enforcement, customs, and military personnel, including discussions of national legal authorities and requirements, as well as lessons learned from exercises and actual interdiction cases.

Information sharing among PSI members could and should be enhanced with improvements to the members-only web site maintained by the Government of Germany, making it more comparable to the Information Portal that the United States maintains for the Global Initiative to Combat Nuclear Terrorism (GI or Global Initiative). A central depository for lessons-learned information is especially important. National personnel involved in PSI activities change regularly; a regularized system for sharing information on the past would be invaluable in bringing them quickly up to speed, and improving the collective learning curve.

Over time, if the portal is successful—including maintaining security of shared PSI-only information—it might expand to include rapid dissemination of more sensitive information. Any intelligence shared among over 90 states would necessarily be lowest common denominator. Thus, the PSI web site and any other PSI-based forum for information exchanges could, in no way, substitute for established and situation-specific intelligence channels among small groups of partners.

PSI also needs to improve substantially its public information and outreach, to build and retain support for the long term. Procedurally, PSI should establish a public web site with basic unclassified information on the Statement of Principles, policy and OEG meetings, and exercises. It would be preferable if a partner other than the United States established and maintained the site, to help avoid public perceptions that PSI is dominated by the United States. However, a U.S.-created public web site would definitely be better than none.

The U.S. Department of State web site provides up-to-date information on PSI, but is short on content. A dedicated public PSI site should provide much more unclassified data on exercises before and after they occur, on actual interdictions, on the OEG, and on PSI meetings. Any public information released must, of course, be consistent with intelligence and operational security requirements, and with the political sensitivities of many PSI partners. However, an effort should be made to release as much information as possible, as regularly as possible—rather than limit it to major addresses like the one by then-National Security Advisor Stephen Hadley at the PSI fifth anniversary meeting.

Finally, national interdiction decisionmakers and operational implementers must develop and maintain solid communication links on a regular basis, heightened during exercises and interdictions. Consistent with security, decisionmakers need to understand well the constraints and possibilities facing the implementers, and the implementers need to understand the fundamental reasons behind policy decisions. Further, partner nations should adopt a more rigorous, systematic approach to analyzing “lessons learned” from both exercises and actual interdictions, and share the results as widely as possible among other PSI participants. The analysis should be undertaken on both national and international levels (for those activities involving more than one PSI state), to include all concerned agencies: policy decisionmakers; intelligence collectors and disseminators; and, operational elements in the field and in national capitals.

Financing PSI Activities

Most PSI partners, and certainly the United States, finance their Initiative activities “out of hide”—from regular, non-dedicated operational budgets. Thus far, U.S. combatant commands have agreed to assume that burden. Strategic Command and Southern Command have hosted OEG meetings, and several regional commands have provided assets for most PSI live exercises. Nevertheless, over time, the lack of a dedicated budget may make PSI partners and important government components (such as the U.S. combatant commands) reluctant to chair meetings, lead exercises, etc. That reluctance will only increase if, as expected, most PSI partners face progressively stricter budget constraints over the next several years.

The Department of Defense (DOD) should consider adding a PSI line item to its budget, with transfer authority, that could be used to support the full range of national PSI activities by DOD and other agencies: military exercises; law enforcement workshops; web portals; and OEG and policy-level regional and plenary meetings. Although there will be many competing demands for scarce DOD funds over the coming years, combating WMD and missile proliferation, and PSI’s role in that effort, are too important to be starved of funds.

An alternative approach would be to provide dedicated PSI budgets not just for DOD, but also for all U.S. Government departments and agencies with substantial PSI operational responsibilities, such as the Departments of State, Homeland Security, Justice and the Intelligence Community. That would have the advantage of direct funding to each concerned agency, avoiding the bureaucratic delays associated with intra-governmental transfers. However, it would require consistent, thorough coordination by the White House NSC staff of the various agency PSI budget requests and expenditures.

Whether a new PSI budget authorization and appropriation were granted for DOD alone or for all concerned agencies, care would have to be taken to ensure that the Administration’s ability to engage in unpredicted (and unpredictable) PSI activities was not constrained. For example, it would be counterproductive to require advance notification to Congress of participation in short-notice, highly-sensitive interdiction activities.

The Congress would likely support a budget request for PSI, whether just for DOD or for all involved agencies. The 110th Congress strongly encouraged PSI budget submissions in H.R.1, “Implementing Recommendations of the 9/11 Commission Act of 2007” (Public Law 110-53, August 3, 2007). A sense of the Congress provision urges the President to “strive to expand and strengthen the Proliferation Security Initiative,” including through:

Issuing a presidential directive to the relevant United States Government agencies and departments that directs such agencies and departments to—

- (A) establish clear PSI authorities, responsibilities, and structures;
- (B) include in the budget request for each such agency or department for each fiscal year, a request for funds necessary for United States PSI-related activities; and
- (C) provide other necessary resources to achieve more efficient and effective performance of United States PSI-related activities.¹¹⁶

The strong congressional support evidenced in H.R.1 would only increase if greater information sharing heightened congressional and public understanding of PSI’s reach and achievements.

Legal Framework

Most official and unofficial observers, supporters and critics alike, believe that PSI could benefit from a strengthening of the underlying international legal authorities, particularly for interdictions in international waters and airspace. As mentioned above, some proliferators have changed their practices to evade PSI, avoiding national waters and ports of Initiative supporters as much as possible. Partners can continue to complicate and harass such shipments by shadowing them, but that is no substitute for actual interdiction.

Several steps should be taken to reinforce the international legal bases of PSI. First, a redoubled outreach effort to expand participation by more coastal and transshipment states should occur. The gaps in Asia, Africa and South America are especially great. The highest priority should still be given to winning PSI endorsement by those states identified previously as the leading nonpartners.¹¹⁷ However, any country with national waters and airspace will be a useful addition to the PSI ranks, except for those (such as Iran and North Korea) that defy both their international nonproliferation obligations and the PSI principles.

Second, the United States and/or other leading PSI partners should seek to conclude ship-boarding agreements with remaining states that have flags of convenience,¹¹⁸ including those that are not PSI members. Some flag states such as Tuvalu and St. Vincent may simply feel that they do not have the resources to participate in PSI, but would be willing to sign boarding agreements.

The international legal bases for PSI would be further strengthened with entry into force of the 2005 SUA Protocol. The United States and other PSI partners should ratify the Protocol as a matter of priority. Thus far, only five PSI partners have done so: Fiji, the Marshall Islands, Spain, Switzerland, and

¹¹⁶ Section 1821(a), P.L. 100-53.

¹¹⁷ Brazil, China, Egypt, India, Indonesia, Malaysia, Pakistan and South Africa.

¹¹⁸ Those states include: Antigua and Barbuda, Aruba (NL), Barbados, Bermuda (UK), Burma, Cambodia, Canary Islands (Spain), Cayman Islands (UK), Cook Islands (NZ), Cyprus, Germany, Gibraltar (UK), Honduras, Lebanon, Luxembourg, Mauritius, Netherlands Antilles, St. Vincent, Sri Lanka, Tuvalu, Vanuatu.

Vanuatu.¹¹⁹ The U.S. Senate gave its advice and consent to ratification in September 2008, but the United States has not yet deposited its instrument. That should be done without further delay, strengthening the U.S. ability to urge similar action by others. Although the SUA Protocol does not resolve all issues regarding WMD and missile proliferation interdiction, it does advance the subject considerably. The inaction of leading PSI partners is difficult to understand, in view of the consistency between the Protocol and the Statement of Interdiction Principles, and the statement in the Washington Declaration at the Fifth Anniversary PSI Meeting that “[states] that have signed the 2005 SUA Protocol are encouraged to work toward ratifying it.”¹²⁰

The United States and other leading PSI partners should also join Australia in pressing for negotiation of the counterpart amendment to the 1971 Montreal Convention, that would prohibit proliferation shipments by air. Given the slowness of the multilateral treaty amendment process, it will be years before such an amendment could enter into force. That is not a reason to delay the process, but PSI cannot expect such an international legal change in the near future.

At least one observer has called for amending Article 110 of the 1982 United Nations Convention on the Law of the Sea (UNCLOS) “to include trafficking in weapons of mass destruction as a reason for a warship to approach and visit another state’s vessels in international waters.”¹²¹ The difficulty the United States has had in ratifying UNCLOS¹²² underscores that such an amendment is not feasible in the foreseeable future. But the same observer argues that an ever-widening network of PSI ship-boarding agreements would have much the same impact, creating a norm whose formalization in an UNCLOS amendment might be rather straightforward:

...even absent such an overarching instrument [amendment to UNCLOS Article 110] in the short term, the proliferation of bilateral agreements granting the right to approach and visit vessels on the high seas to search for WMD will steadily increase the number of countries accepting this practice, gradually establishing it as an international norm and then as creating a perceived duty, a matter of

¹¹⁹ The other states that have brought the Protocol into force are neither PSI participants nor major powers: Cook Islands, Ethiopia, and Saint Kitts and Nevis. Source: *Status of Conventions*, 28 February 2009, at <http://www.imo.org>.

¹²⁰ “Washington Declaration for 5th Anniversary Senior-Level Meeting,” at Appendix D.

¹²¹ Joel A. Doolin, “The Proliferation Security Initiative: Cornerstone of a New International Norm,” *Naval War College Review*, Spring 2006, p. 12. Article 110 of UNCLOS specifies the conditions under which a warship or military aircraft may board a foreign ship on the high seas, as follows:

Article 110 Right of visit

1. Except where acts of interference derive from powers conferred by treaty, a warship which encounters on the high seas a foreign ship, other than a ship entitled to complete immunity in accordance with articles 95 and 96, is not justified in boarding it unless there is reasonable ground for suspecting that:

- (a) the ship is engaged in piracy;
- (b) the ship is engaged in the slave trade;
- (c) the ship is engaged in unauthorized broadcasting and the flag State of the warship has jurisdiction under article 109;
- (d) the ship is without nationality; or
- (e) though flying a foreign flag or refusing to show its flag, the ship is, in reality, of the same nationality as the warship.

4. These provisions apply *mutatis mutandis* to military aircraft.

¹²² Although the Senate Foreign Relations Committee unanimously recommended advice and consent to ratification in March 2004, the Treaty has not yet come before the full Senate.

customary law. Ultimately the effect would be the same: codification in an amendment to Article 110 to the 1982 law of the sea agreement, making international recognition of the customary duty explicit and the rules for its practice uniform. Reasonable suspicion that a vessel is carrying cargo or terrorists associated with WMD would then be one of the formally enumerated reasons for interrupting the freedom of navigation on the high seas.¹²³

Other observers have proposed another, less ambitious means to enhance PSI's legal bases: "seek a UNSCR authorizing the use of force for interdiction on or over the high seas and in territorial waters of weapons of mass destruction and related materials, either in specific cases or in general."¹²⁴ A resolution granting general authorization for high seas interdictions of proliferation shipments seems most unlikely. The best chance to achieve such a provision was during the consideration of UNSCR 1540, coming as it did just months after the creation of PSI, the *BBC China* interdiction and the unraveling of the A.Q. Khan network. Even under those favorable circumstances, the UNSC would agree only to call on all states "to take cooperative action" against proliferation "in accordance with their national legal authorities and legislation and consistent with international law"¹²⁵—thus approving PSI, but doing nothing to broaden its legal foundation.

While general UNSCR authorization of interdiction in international waters or airspace is unlikely, the Council proved willing in UNSCR 1874 to urge and encourage such action against suspect North Korean shipments. However, it did so only after the severe provocation of the second North Korean nuclear test in May 2009, and it did not authorize the use of force in interdictions. It probably would require at least as great a provocation by Iran for the UNSC to grant comparable authorities against Iranian shipments; if anything, the bar might be set even higher, given the importance to many major states of trade with Iran.

Moreover, the extent to which states implement the new provisions in UNSCR 1874 remains to be seen. PSI partners should place the highest priority on seeking to ensure their full and successful implementation. This will require both a strong commitment by PSI participants along North Korean trade routes, and their encouragement of implementation by all other states. The latter will be particularly critical, given the importance to successful implementation of China and of the many East Asian coastal states that have not joined PSI. To ensure these commitments from others and effective implementation of UNSCR 1874, U.S. leadership will be essential.

Finally, a central means to strengthen the legal bases for PSI remains improvement of national legislation and enforcement, regarding: export controls; criminalization of proliferation; right to seize and hold suspect cargoes and personnel; security of WMD materials, etc. The OEG should expand regional workshops to look closely at partners' national legal frameworks and areas of needed improvement. Another vehicle to the same end would be the UN 1540 Committee, whose aims are comparable, but the OEG would almost certainly be less bureaucratic, more action-oriented, and more strongly focused on counterproliferation requirements.

Closely related, the OEG should hold more regional workshops with key elements of the private sector, such as shipping companies, air cargo transporters, insurers, and financiers. While such sessions would not strengthen national and international legal frameworks *per se*, they could definitely improve their operation. They would heighten the private companies' awareness of the proliferation threat and of the

¹²³ Doolin, *Loc. cit.*

¹²⁴ Valencia, *Loc. cit.*

¹²⁵ See text of UNSCR 1540 at Appendix C.

behavior expected and required of them if they want to be law-abiding and maintain positive international reputations.

Conclusion

Any discussion of strengthening PSI risks leaving the inaccurate impression that the Initiative has severe shortcomings. In fact, PSI has an impressive record of success. The Initiative has been effective in reinforcing international norms against proliferation, enhancing threat awareness, developing counterproliferation capabilities, and improving habits and channels of cooperation among member states. Yet there is still substantial room for improvement, including staying ahead of ever-changing proliferation practices while maintaining, and heightening, its original momentum. As one former senior U.S. Government official stated to the authors: “PSI is like a shark; it must keep moving or it will die.”¹²⁶ That assessment is neither surprising nor negative. PSI’s reason for being—its unique contribution to the global fight against proliferation—is, above all, its action orientation.

¹²⁶ Interview, December 2008.

Chapter 5

Applying the Proliferation Security Initiative Model

Introduction

The fundamental thrust of the Proliferation Security Initiative is to act against WMD and missile proliferation, relying on innovation over process, speed over consensus, and cooperation over obligation. That does not supplant, or in any way lessen the importance of, the legally- and politically-binding elements of the nonproliferation regime. On the contrary, PSI reinforces those and adds significantly to their enforcement. That enforcement is not just directed against dedicated state and non-state proliferators. By endorsing the Statement of Interdiction Principles, PSI partners also reaffirm their commitments to the existing treaties and agreements against WMD and missile proliferation and vow to ensure compliance within their borders.

Within that overall characterization, the “PSI model” has several defining features, including:

- Foundation of explicit shared principles;
- High-level political endorsement and support;
- Compatibility with national and international law, and nonproliferation treaties and agreements;
- Broadest possible membership, consistent with the purposes of the Initiative;
- Voluntary participation in the Initiative and individual activities;
- Lack of central bureaucratic structure;
- No requirement for consensus, except on some procedural matters and by founding members on basic principles;
- No new legal obligations, other than those voluntarily adopted or pursued by individual members;
- Sharing of information, lessons learned, best practices to enhance members’ capacities to fulfill Initiative goals;
- Flexibility to adjust collective practices to meet new or changing requirements;
- Periodic meetings of an operational working group or groups; and
- Focus on action.

Any application of the “PSI model” need not necessarily include all of the above elements. Indeed, a somewhat loose definition of the “PSI model” is only appropriate, given that flexibility and adaptation to changing circumstances are two of its hallmarks.

Global Security Networks

A broader, more theoretical approach to substantially the same issue was suggested in 2002 by Jean-Francois Rischard, then the World Bank Vice-President for Europe.¹²⁷ Rischard’s concepts of “global issues networks,” like PSI, are predicated on the finding that “[t]raditional institutions are incapable of

¹²⁷ Jean-Francois Rischard, “Global Issues Networks: Desperate Times Deserve Innovative Measures,” *The Washington Quarterly*, Winter 2002-03, Vol. 26(1). The article is drawn from: J.F. Rischard, *High Noon: 20 Global Problems, 20 Years to Solve Them*, New York (Basic Books), 2002.

addressing the growing list of complex global issues.”¹²⁸ Rischard identifies “about 20” global issues,¹²⁹ with the following defining characteristics:

- *Planetary.* Many of them have make-or-break implications for the world’s common future...
- *Urgency.* Every year lost in addressing these issues means several years of delay in getting them under control...
- *Relative affordability over the long term.* ...the monetary cost of remedying inherently global issues is minuscule relative to the much larger, long-term cost of not addressing them.
- *Costly in the short term.* ...
- *Neglect.* Aside from minimal, short-lived attention, the current international problem-solving architecture has not tackled any of these issues decisively and definitively.¹³⁰

While today’s institutions are “ill equipped to address these global threats,” Rischard posits that, “with a little imagination and initiative, innovative policymaking bodies called global issue networks can transcend the limits imposed by contemporary territorial and hierarchical institutions.”¹³¹ The networks would develop and apply voluntary norms, rather than legislation, and involve governments, non-governmental organizations and private firms. Rischard identifies “two generic characteristics [of networked governance] that directly address the limitations of the current international system. First, bureaucracy and hierarchy must be minimized. ... Second, start-up and delivery time must be fast.”¹³² Rischard further identifies four criteria for success by global issues networks: “speed;” “redefining legitimacy on a global scale;”

¹²⁸ Rischard, *op. cit.*, p. 17.

¹²⁹ Rischard lists the following global issues. He makes clear the list is not necessarily definitive.

Issues involving the global commons

- Global warming
- Biodiversity and ecosystem losses
- Fisheries depletion
- Deforestation
- Water deficits
- Maritime safety and pollution

Issues whose size and urgency require a global commitment

- Massive step-up in the fight against poverty
- Peacekeeping, conflict prevention, combating terrorism
- Education for all
- Global infections [sic] diseases
- Digital divide
- Natural disaster prevention and mitigation

Issues needing a global regulatory approach

- Reinventing taxation for the twenty-first century
- Biotechnology rules
- Global financial architecture
- Illegal drugs
- Trade, investment, and competition rules
- Intellectual property rights
- E-commerce rules
- International labor and migration rules.

Rischard, *op. cit.*, p. 19.

¹³⁰ Rischard, *op. cit.*, p. 20.

¹³¹ Rischard, *op. cit.*, pp. 17-18.

¹³² Rischard, *op. cit.*, p. 24.

“diversity” (reflecting views and contributions of a range of players); and “compatibility with traditional institutions.”¹³³

Although Rischarad does not identify WMD and missile proliferation as global issues, they clearly fit his definition of the category. Moreover, PSI possesses the generic characteristics he identifies for networked governance, and meets his criteria for success. While Rischarad’s focus is primarily economic, several of the global issues he does identify have direct national security relevance, especially: peacekeeping, conflict prevention, combating terrorism; global infectious diseases; biotechnology rules; and global financial architecture. The following sections will examine actual and possible application of both the PSI model, and Rischarad’s more general concept, in the international security area.

In addition, two senior foreign government officials who have been closely involved with PSI have suggested that the PSI model might usefully be applied to two international social and economic problems: climate change and response to humanitarian disasters.¹³⁴ In both cases, the officials thought that the PSI approach of rapid, *ad hoc* international cooperative action, capacity building, and sharing information and lessons learned would be very productive. Rischarad also includes both climate change and disaster response in his list of global issues. While both appear promising areas for application of the PSI model, the following discussion is confined to international security problems and, therefore, does not address either climate change or disaster response.¹³⁵

Global Initiative to Combat Nuclear Terrorism

The Global Initiative was consciously modeled on the PSI.¹³⁶ It too was proposed at the highest level, in this case jointly by Presidents Bush and Vladimir Putin on the margins of the G-8 Summit in St. Petersburg in July 2006. The GI was designed to “enhance cooperation between and build the capacity of all willing partner nations to combat the global threat of nuclear terrorism.” Six areas of cooperation were initially identified:

- Improve accounting, control, and physical protection of nuclear material and radioactive substances, as well as security of nuclear facilities;
- Detect and suppress illicit trafficking or other illicit activities involving such materials, especially measures to prevent their acquisition and use by terrorists;
- Respond to and mitigate the consequences of acts of nuclear terrorism;
- Ensure cooperation in the development of technical means to combat nuclear terrorism;
- Ensure that law enforcement takes all possible measures to deny safe haven to terrorists seeking to acquire or use nuclear materials;
- Strengthen our respective national legal frameworks to ensure the effective prosecution of, and the certainty of punishment for, terrorists and those who facilitate such acts.¹³⁷

¹³³ Rischarad, *op. cit.*, pp. 29-31.

¹³⁴ Interviews, February 2009, March 2009.

¹³⁵ However, the discussion below on “Combating Biological Weapons Proliferation and Promoting Public Health” relates to one important category of disaster response: responding to naturally-occurring epidemic disease as well as deliberate biological weapons attack.

¹³⁶ Interview, April 2009.

¹³⁷ Media Note, Office of the Spokesman, U.S. Department of State, Washington, DC, July 25, 2006, *U.S.-Russia Joint Fact Sheet on the Global Initiative to Combat Nuclear Terrorism*, <http://2001-2009.state.gov/r/pa/prs/ps/2006/69016.htm>.

The United States, Russia and 11 other initial partners¹³⁸ quickly agreed to a Statement of Principles “to develop partnership capacity to combat nuclear terrorism on a determined and systematic basis, consistent with national legal authorities and obligations they have under relevant international legal frameworks.”¹³⁹ The initial partners also agreed to a “Terms of Reference for Implementation and Assessment,” that, among other things, established an Implementation and Assessment Group (IAG). The United States and Russia co-chair the IAG. The initial members were Australia, Canada, China, France, Germany, Italy, Japan, Kazakhstan, Turkey and the United Kingdom.¹⁴⁰ (Morocco became a member at the first meeting.) The Global Initiative has held five plenary meetings since its inception: October 2006 (Rabat, Morocco); February 2007 (Ankara, Turkey); June 2007 (Astana, Kazakhstan); June 2008 (Madrid, Spain); and June 2009 (The Hague, Netherlands).

Like PSI, the GI has no central structure, and is open to all states endorsing its Statement of Principles. Also like PSI, the GI has quickly won broad support, with 75 states now partners. Those include all leading PSI members, with one exception: Singapore. More striking, the GI includes three of the leading non-participants in PSI: China, India and Pakistan.¹⁴¹ China was an initial partner, brought into the Initiative by Russia.

Not only does the Global Initiative benefit from a more diverse appeal than PSI, it appears to sustain a comparable level of interaction among the partners. It is important to stress “appears to entail,” because there is relatively little public information available about Global Initiative activities. According to the U.S. Department of State, as of June 2009, GI partners had “conducted over thirty Global Initiative workshops, conferences, and exercises aimed to build capacity to prevent, detect, and respond to acts of nuclear terrorism.”¹⁴² That is an average of 10 events a year since the GI’s establishment in 2006; the PSI average is nearly the same, with 37 exercises and 25 OEG meetings and workshops since 2003. However, there is even less public information about specific GI activities than there is about PSI events. For example, the Global Initiative has maintained a detailed and ambitious Plan of Work since February 2007; however, no partner nation appears to have made it public, except for the release of the initial plan by the Russian Mission to the United Nations Organizations in Vienna.¹⁴³

¹³⁸ Australia, Canada, China, France, Germany, Italy, Japan, Kazakhstan, Morocco, Turkey and the United Kingdom. The IAEA attended the meeting as an observer.

¹³⁹ Bureau of International Security and Nonproliferation, U.S. Department of State, Washington, DC, November 20, 2006, *Statement of Principles for the Global Initiative to Combat Nuclear Terrorism*, <http://www.state.gov/t/isn/rls/other/76358.htm>.

¹⁴⁰ Bureau of International Security and Nonproliferation, U.S. Department of State, Washington, DC, November 20, 2006, *Terms of Reference for Implementation and Assessment*, <http://www.state.gov/t/isn/rls/other/76421.htm>.

¹⁴¹ See Appendix I for a comparison of PSI, GI, PSI OEG and FATF membership.

¹⁴² U.S. Department of State, Office of the Spokesman, *Media Note: The 2009 Plenary Meeting of the Global Initiative to Combat Nuclear Terrorism, The Hague, The Netherlands, 16-17 June 2009*, PRN: 2009/592, June 15, 2009, at <http://www.state.gov/r/pa/prs/2009/06a/124723.htm>.

¹⁴³ The Plan of Work as of February 12, 2007 listed the following planned and recommended activities for 2007 and 2008:

- Australia—Asia-Pacific Seminar on Combating Nuclear Terrorism, May 2007
- Canada—Workshop on Securing Radioactive Sources, Spring 2008
- France—Workshop on Research and development of New Means of Detection of Nuclear Materials and Radioactive substances, End 2008
- Germany—Workshop on the Functioning of a National Register of Highly Radioactive Sources, 3rd or 4th quarter 2007

That first Plan of Work was impressive, but it is not known publicly how many of the prospective events actually occurred, still less their results, nor is it apparent whether additional training and capacity-building activities have occurred or are being planned. One reason might be that the Global Initiative is more focused on developing communications among partners, especially through its Information Portal, than on public outreach. If so, that could be inimical to the overall effort, especially as partners seek to engage their private sectors and other potential member governments in the Global Initiative.

Another reason might be the absence of a GI equivalent to PSI's OEG, to serve as a focus and goad to action. That lack was at least partially redressed with the establishment in April 2008 of a Global Initiative Exercise Planning Group, whose creation was decided at the June 2007 plenary meeting in Astana. The April meeting drew "[e]xercise planners from defense, energy, foreign affairs, law enforcement, intelligence, and other ministries from over 20 nations."¹⁴⁴ It was followed quickly by a table-top exercise hosted by Spain in May 2008 and a field exercise ("Atom Anti-Terror 2008") hosted by Kazakhstan in June 2008. The concluding statement from the June 2008 plenary meeting in Madrid "look[ed] forward to having a strong and multi-faceted exercise program in 2009," but without further details.¹⁴⁵

Despite some weaknesses (for example, taking almost two years to begin training exercises) and other real or perceived gaps in Global Initiative activity, the effort overall appears successful. It scores high on at least three of Rischard's four criteria for global issues network success: redefining legitimacy on a global scale; diversity; and compatibility with traditional institutions. GI also has performed relatively well on the fourth criterion, speed, developing much more quickly than traditional international organizations

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- Japan—Expert Seminar on the Promotion of Accession to the International Counter-Terrorism Conventions and Protocols, March 2007
 - Morocco—Regional Outreach Meeting for West African and Arabic Countries, 4th quarter 2007 or 1st quarter 2008
 - Morocco—Workshop on Prevention of Illicit Trafficking of Nuclear or Radioactive Materials, 4th quarter 2007
 - Morocco—Workshop on Emergency Response and Mitigation in Case of Malevolent Acts Involving Use of Radioactive Materials, 2nd quarter 2008
 - Russia—Conference on Cooperation of Intelligence, Security and Law Enforcement Services in the Field of Detection, Prevention and Investigation of Acts of Nuclear Terrorism, 3rd quarter 2007
 - Russia—Workshop on Best Practices to Ensure Security of Nuclear Materials within the Framework of the International Center on Uranium Enrichment, July-August 2007
 - Turkey—Workshop on Information Sharing for Preventing Assistance to Nuclear Terrorism Activities, 4th quarter 2008
 - United Kingdom—Workshop on Collaborative Measures to Combat Nuclear Smuggling, July 2007
 - United States—Global Initiative Law Enforcement Conference, June 2007
 - United States—Three Workshops on Development of a Global Nuclear Detection Architecture Guidelines Document, 1st, 2nd and 3rd quarters 2007
 - United States—Global Initiative Radiological Search Procedures and Training Workshop, 4th quarter 2007
 - United States—Four Seminars on Global Initiative Nuclear Commodity Identification Training, 1st, 2nd, 3rd and 4th quarters 2007
 - United States—Workshop on Remote Detection of Radiological Materials, 4th quarter 2007
 - United States—Conference on Establishing a Combating Weapons of Mass Destruction Information Portal, September 2007.

Source: Permanent Mission of the Russian Federation to the International Organizations in Vienna, *Global Initiative to Combat Nuclear Terrorism Plan of Work (as of 12 February 2007)*, at <http://www.rusmission.org/iaea/6>.

¹⁴⁴ Media Note, Office of the Spokesman, U.S. Department of State, Washington, DC, April 15, 2008, *Global Initiative to Combat Nuclear Terrorism Launches Exercise Planning Efforts*, <http://2001-2009.state.gov/r/pa/prs/ps/2008/apr/103564.htm>.

¹⁴⁵ Fact Sheet, Bureau of International Security and Nonproliferation, U.S. Department of State, Washington, DC, June 17, 2008, *Fourth Meeting of the Global Initiative, Madrid*, at <http://2001-2009.state.gov/t/isn/rls/fs/106194.htm>.

and even some nontraditional ones. Overall, the creation and evolution of the Global Initiative testify to the strength of the PSI model as an approach to filling in the gaps of the existing regimes in areas central to international security.

Combating Nuclear Weapons Proliferation and Promoting Peaceful Nuclear Energy

Until the recent economic downturn, the world expected a steep increase in civil nuclear energy. While that “nuclear renaissance” has been delayed, it will undoubtedly occur in time, as both developed and lesser-developed states seek to expand power generation while reducing both greenhouse gases and dependence on expensive, polluting and increasingly scarce fossil fuel. The World Association of Nuclear Operators (WANO) and World Institute for Nuclear Security (WINS), discussed below, address two critical requirements for a nuclear renaissance: increased safety and security. A promising application of the PSI model may be to help foster the third requirement: that the expansion of civil nuclear energy not increase the danger of nuclear proliferation.

Such an initiative would build on several different activities and proposals over the last several years. A key aim of those proposals has been to stem the expansion of enrichment and reprocessing, through both constraints against the spread of those technologies and incentives for states not to pursue them. On the constraints side, President Bush proposed in his February 2004 speech at the National Defense University to limit enrichment and reprocessing to the 10 states that already possessed fully-functioning plants.¹⁴⁶ After lengthy discussions, NSG member states are now considering a criteria-based approach to controlling the export of these sensitive technologies.

On the incentives side, several ideas have been put forward to help ensure states’ reliable access to nuclear fuel, obviating any requirement for indigenous production. In 2006, the Nuclear Threat Initiative (NTI), a U.S. NGO, offered \$50 million to help set up a low-enriched uranium stockpile managed by the IAEA, contingent on achievement by September 2009 of \$100 million in matching funds and IAEA Board of Governors agreement on operating details. In March 2009, the \$100 million target was reached.¹⁴⁷ The stockpile would not replace market-based fuel supply, but act as a guarantee against supply disruptions (provided those disruptions were not caused by customer noncompliance with NPT or IAEA safeguards obligations). In another approach, the Russian Government proposed in January 2006 to establish a network of multilateral nuclear fuel cycle centers that would provide civil reactor fuel; the initial center is to be established at Angarsk, Russia.¹⁴⁸

President Bush and President Putin brought together these and other strands in their July 2007 Declaration on Nuclear Energy and Nonproliferation, pledging to support expansion of nuclear energy in a way that strengthens nuclear nonproliferation. The two Presidents further “welcome[d] the cooperation of states that share this common vision and are committed to jointly taking steps to make this vision a

¹⁴⁶ White House, Office of the Press Secretary, “President Announces New Measures to Counter the Threat of WMD: Remarks by the President on Weapons of Mass Destruction Proliferation, Fort Lesley J. McNair—National Defense University, Washington, D.C.,” February 11, 2004.

¹⁴⁷ The contributors, in addition to NTI are: United States (\$50 million); European Union (\$32 million), United Arab Emirates (\$10 million), Kuwait (\$10 million), and Norway (\$5 million). See Nuclear Threat Initiative, *NTI/IAEA Fuel Bank Hits \$100 Million Milestone: Kuwaiti Contribution Fulfills Buffett Monetary Condition*, Thursday, March 5, 2009.

¹⁴⁸ For a detailed discussion of the Russian proposal, see Anya Loukianova, *Issue Brief: The International Uranium Enrichment Center at Angarsk: A Step Towards Assured Fuel Supply?*, November 2008, at http://www.nti.org/e_research/e3_93.html.

reality.” The declaration is highly reminiscent of the PSI and Global Initiative Statements of Principles in its definition of a shared vision, outline of specific actions and call for international cooperation.¹⁴⁹

On the other hand, the U.S.-Russian declaration on nuclear energy and nonproliferation addresses issues that differ significantly from the foci of PSI and GI. Civil nuclear energy is highly capital intensive; relatively few companies (or governments) construct nuclear power reactors, enrich uranium, reprocess fuel, or have the financial and technical resources for highly-developed research and development on advanced nuclear energy technologies. Consequently, any application of the PSI model in this area would necessarily group countries with very different resources and aspirations—suppliers; current nuclear power operators; aspirants to civil nuclear power who can fully finance national programs; and aspirants who require financial assistance and/or regional cooperation to develop and operate civil nuclear power. The IAEA and international financial institutions would also be important participants.

Any application of a PSI-type model to the nexus of nuclear energy and nonproliferation would require tremendous effort to avoid the reality or perception of a have/have-not dichotomy among the participants. In many ways it would be simpler, and consistent with some suppliers' competitive desires, to pursue the issues of nuclear energy and nonproliferation bilaterally. However, the countervailing benefits of a multinational approach bringing together all concerned states appear well worth the complications. At the same time, it would be important to limit such an initiative to the countries directly concerned. The IAEA groups virtually all states; any nuclear energy-nonproliferation network should be more focused, on both the supply and demand side.

In the first months after the joint declaration, the United States and Russia reached out together to the IAEA Secretariat, IAEA member countries, and key nuclear power suppliers and potential customers to explain the approach and garner support. Over time, however, joint outreach became less frequent, and has been in complete abeyance since the Russian invasion of Georgia in August 2008. That Russian military action led the Bush Administration to withdraw from congressional consideration the U.S.-Russia Agreement for Cooperation in the Field of Peaceful Uses of Nuclear Energy (“123 agreement”).¹⁵⁰ While many forms of nuclear cooperation may be conducted without a 123 agreement, its absence is an important technical constraint. Perhaps more important, the Russian Government views the agreement as central to a continuation of activities under the July 2007 declaration on nuclear energy and nonproliferation.¹⁵¹ In their April 1, 2009 Joint Statement, President Obama and Russian President Medvedev committed to “work to bring into force” the 123 agreement,¹⁵² but it is uncertain when and under what circumstances the Obama Administration will submit an agreement to the Congress.

Even before the suspension of the Russian “123 agreement,” the United States conducted important national diplomatic outreach to advance the basic principles of encouraging peaceful nuclear energy while strengthening nonproliferation. The most important achievements from that effort were four memoranda of understanding (MOUs) concluded in 2008 with the Governments of Bahrain, Jordan,

¹⁴⁹ See Appendix K for the full text of the U.S.-Russian Declaration on Nuclear Energy and Nonproliferation.

¹⁵⁰ U.S. Department of State, Bureau of Public Affairs, *Statement on U.S.-Russia 123 Agreement: Statement by Secretary Condoleezza Rice, Washington, DC, September 8, 2008*, at <http://2001-2009.state.gov/secretary/rm/2008/09/109256.htm>.

¹⁵¹ Interview, March 2009.

¹⁵² The White House, Office of the Press Secretary, *Joint Statement by President Dmitriy Medvedev of the Russian Federation and President Barack Obama of the United States of America*, For Immediate Release, April 1, 2009, at http://www.whitehouse.gov/the_press_office/Joint-Statement-by-President-Dmitriy-Medvedev-and-President-Barack-Obama-of-the-United-States-of-America/.

Saudi Arabia and the United Arab Emirates. None of the MOUs is legally-binding, but each includes important political commitments. Each indicates the partner Government's interest in developing civil nuclear energy, and "intent...to rely on the international fuel market rather [than] seeking enrichment or reprocessing capabilities." For its part, the United States intends to help these countries implement safe and secure peaceful nuclear energy.¹⁵³

Those bilateral agreements are important in their own right, especially given the stark contrast with the different approach taken by regional neighbor Iran. Yet the commitments they contain—and their eventual implementation—would be greatly strengthened in a multilateral, PSI-type network grouping key civil nuclear suppliers, operators and aspirants. Many key supplier states might welcome such an approach. In turn, if suppliers participated, potential customers probably would as well. However, the time may not yet be right for such an initiative, for two basic reasons. First, close Russian involvement would be critical, and would almost certainly not happen unless and until the "123 agreement" comes back on track. Second, and more fundamentally, the international economic situation must improve sufficiently that potential customer states once again look to civil nuclear power to help propel economic growth and development, and that supplier states feel able to assist or subsidize needy states' access to that power.

Combating Biological Weapons Proliferation and Promoting Public Health

One of the most promising, if challenging, areas for productive application of the PSI model would be in cooperation to advance global health security—simultaneously combating the threats of biological weapons and biological terrorism, and advancing public health against endemic infectious disease. There are important requirements and opportunities for close collaboration between the two, often different, international communities concerned with biological weapons and public health. Especially because many Category A pathogens exist widely in nature, disease suppression, surveillance and response activities serve both security and public health purposes. At the same time, care must be taken to ensure that public health-related work with these pathogens takes place under strict security and safety standards, to guard public health and prevent diversion to weapons purposes.

A wide range of fora and activities now aim to address various elements of this problem. The Epidemic and Pandemic Alert and Response (EPR) program of the World Health Organization (WHO) has six core functions that are equally (and explicitly) relevant to dealing with biological weapons as well as naturally-occurring disease:

- Support Member States for the implementation of national capacities for epidemic preparedness and response in the context of the IHR [International Health Regulations] (2005), including laboratory capacities and early warning and alert and response systems;
- Support national and international training programmes for epidemic preparedness and response;
- Coordinate and support Member States for pandemic and seasonal influenza preparedness and response;
- Develop standardized approaches for readiness and response to major epidemic-prone diseases...;
- Strengthen biosafety, biosecurity and readiness for outbreaks of dangerous and emerging pathogens outbreaks...;

¹⁵³ Mary Alice Hayward, *Establishing the International Framework to Deter Development of Weapons Technology Amidst the Global Nuclear Renaissance: Remarks at Exchange Monitor Conference, Washington, DC, December 3, 2008*, at <http://2001-2009.state.gov/t/isn/rls/rm/112879.htm>.

- Maintain and further develop a global operational platform to support outbreak response and support regional offices in implementation at regional level.¹⁵⁴

The Global Outbreak Alert and Response Network (GOARN), founded in 2000, is an important element of WHO's EPR program. GOARN "is a voluntary technical partnership of approximately 140 institutions coordinated by WHO to support countries in disease outbreak investigation and response, primarily through the deployment of multidisciplinary teams. GOARN's mission is rapid identification and/or confirmation and effective response to disease outbreaks of international public health importance."¹⁵⁵ Since its founding, GOARN has responded to more than 50 events in about 40 countries.¹⁵⁶

In November 2002, the BWC Fifth Review Conference adopted a work program addressing many of the same problems. Specifically, BWC States Parties agreed to "discuss, and promote common understanding and effective action" on several practical issues, in order both to enhance compliance with the Convention and to help counter biological threats:

- The adoption of necessary national measures to implement the prohibitions set forth in the Convention, including the enactment of penal legislation;
- National mechanisms to establish and maintain the security and oversight of pathogenic microorganisms and toxins;
- Enhancing international capabilities for responding to, investigating and mitigating the effects of cases of alleged use of biological or toxin weapons or suspicious outbreaks of disease;
- Strengthening and broadening national and international institutional efforts and existing mechanisms for the surveillance, detection, diagnosis and combating of infectious diseases affecting humans, animals, and plants;
- The content, promulgation, and adoption of codes of conduct for scientists.¹⁵⁷

The BWC Sixth Review Conference, in 2006, continued and expanded that work program, agreeing on six topics to be addressed before the Seventh Review Conference in late 2011:

- Ways and means to enhance national implementation, including enforcement of national legislation, strengthening of national institutions and coordination among national law enforcement institutions.
- Regional and sub-regional cooperation on implementation of the Convention.
- National, regional and international measures to improve biosafety and biosecurity, including laboratory safety and security of pathogens and toxins.
- Oversight, education, awareness raising, and adoption and/or development of codes of conduct with the aim of preventing misuse in the context of advances in bio-science and bio-technology research with the potential of use for purposes prohibited by the Convention.

¹⁵⁴ World Health Organization, *Epidemic and Pandemic Alert and Response*, at <http://www.who.int/csr/en/>.

¹⁵⁵ Center for Biosecurity, University of Pittsburgh Medical Center, *Global Disease Surveillance Response: Global Outbreak Alert and Response Network (GOARN)*, at <http://www.upmc-biosecurity.org>.

¹⁵⁶ World Health Organization, *Global Outbreak Alert and Response Network-GOARN: Partnership in Outbreak Response*, no date.

¹⁵⁷ Fifth Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (Geneva, 19 November-07 December 2001 and 11-22 November 2002), *Final Document*, BWC/CONF.V/17, Geneva, 2002, pp. 3-4.

- With a view to enhancing international cooperation, assistance and exchange in biological sciences and technology for peaceful purposes, promoting capacity building in the fields of disease surveillance, detection, diagnosis, and containment of infectious diseases: (1) for States Parties in need of assistance, identifying requirements and requests for capacity enhancement; and (2) from States Parties in a position to do so, and international organizations, opportunities for providing assistance related to these fields.
- Provision of assistance and coordination with relevant organizations upon request by any State Party in the case of alleged use of biological or toxin weapons, including improving national capabilities for disease surveillance, detection and diagnosis and public health systems.¹⁵⁸

The BWC work programs decided by the Fifth and Sixth Review Conferences reflect a PSI-style evolution in the States Parties' approach to the Convention. For several years, they focused their attention on a fruitless effort to agree on verification provisions that could be added to the BWC. While many States Parties have not abandoned that quest, at least rhetorically, the work programs that they adopted with some difficulty in 2001, and quite readily in 2006, represent a shift to considering *actions* that would advance compliance with, and the objects and purposes of, the Convention.

Finally, the DOD CTR Program has in recent years strengthened its Biological Threat Reduction Program (BTRP) to help partners enhance biosecurity as well as to detect and respond to disease outbreaks. BTRP has been conducted thus far only in former Soviet states; DOD is now considering expanding the effort to other regions. BTRP was funded at about \$800 million over the past 12 years, and reportedly is planned to be increased to about \$250 million per year.¹⁵⁹ The much smaller State Department Biosecurity Engagement Program, funded at about \$25 million annually, conducts cooperative projects outside the former Soviet Union on surveillance, diagnostics, biosafety and biosecurity.¹⁶⁰

A new Global Initiative to Combat Biological Terrorism, modeled on PSI and on the Global Initiative to Combat Nuclear Terrorism, could bring together, and advance, the above national and multinational efforts. Such an initiative would not supplant or officially include WHO activities or BWC discussions. However, it could act to expand the capacity available to WHO as well as individual states, and to implement independently concepts and recommendations that are only being discussed in the BWC context. Some initiative activities could take place just among small groups of participating states, following the current PSI pattern. Others might be in collaboration with WHO regional or country offices—for example, planning and conduct of disease response exercises. A new Global Initiative to Combat Biological Terrorism could also focus individual and combined national assistance programs on improving disease surveillance and detection capabilities, as well as on ensuring high levels of biosafety and biosecurity. Operational Experts meetings could bring together scientific, public health, law enforcement, customs and border security personnel to help ensure beneficial scientific exchanges while preventing proliferation of biological pathogens, equipment or expertise and fostering improved public health, disease surveillance and response.

¹⁵⁸ Sixth Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (Geneva, 20 November-8 December 2006), *Final Document*, BWC/CONF.VI/6, Geneva, 2006, p. 19.

¹⁵⁹ National Research Council of the National Academies, Committee on Prevention of Proliferation of Biological Weapons in States Beyond the Former Soviet Union, Office for Central Europe and Eurasia Development, Security, and Cooperation Policy and Global Affairs, *Countering Biological Threats: Challenges for the Department of Defense's Nonproliferation Programs Beyond the Former Soviet Union*, The National Academies Press (Washington, DC), 2009, p. 1.

¹⁶⁰ *Ibid.*, p. 129.

Global Maritime Partnership

The concept of the Global Maritime Partnership (GMP), or “1000 ship navy,” was originally proposed by then-U.S. Chief of Naval Operations Admiral Mike Mullen in September 2005. Admiral Mullen called for cooperation among the world’s navies, pooling their capabilities to meet global challenges, and also for close cooperation among national military, coast guard and law enforcement. He was explicit that the PSI provides “a model for the future of maritime relationships and security.”¹⁶¹ Admiral Mullen’s proposal fit the call in *The National Strategy for Maritime Security*, published the same month, to “enhance international cooperation to ensure lawful and timely enforcement actions against maritime threats.”¹⁶² Those threats are defined broadly, to include “piracy, terrorism, weapons proliferation, drug trafficking, and other illicit activities.”¹⁶³ Admiral Mullen also has emphasized the importance of cooperation among navies in disaster relief and humanitarian evacuations.¹⁶⁴

The U.S. Naval Postgraduate School has fleshed out the GMP idea in important ways, and in terms that are very familiar to any observer of PSI:

Governance and Membership

GMP is not a formal organization or agreement led by any country, nor does it have any structure requiring formal membership. GMP is self-organized according to partner requirements and is encouraged by mutual international outreach among seafaring nations. Participation in GMP is completely voluntary and seeks to reinforce partner capacity through the promotion and sharing of ‘best practices’ in maritime safety and security, situational awareness, and information. The only requirement for participation is a commitment to the common set of principles.

Principles

Partners in the GMP are committed to promoting maritime cooperation in security and commerce on a determined and systematic basis, consistent with existing national legal authorities and obligations and within relevant international law and legal frameworks.

- Global maritime security requires international cooperation. In the interest of global security, stability, and collective economic prosperity, Partners are bound together by dependence on the seas and the corresponding need for security in the vast maritime domain. The private sector, non-governmental organizations, international organizations, regional partnerships, and national and state governments should work together to ensure that the maritime domain remains a foundation for economic progress.
- Partners will voluntarily seek opportunities to cooperate in capacity building, promoting of maritime security, and protecting the maritime domain from the full range of maritime security

¹⁶¹ Admiral Michael G. Mullen, U.S. Navy, Chief of Naval Operations, “Keynote Address: A Global Network of Nations for a Free and Secure Maritime Commons,” in John B. Hattendorf, ed., *Seventeenth International Seapower Symposium: Report of the Proceedings, 19-23 September 2005*, U.S. Naval War College, Newport, Rhode Island, 2006, p. 6 and *passim*.

¹⁶² U.S. Department of Homeland Security, *The National Strategy for Maritime Security*, September 2005, p. 14.

¹⁶³ U.S. Navy, U.S. Marine Corps, U.S. Coast Guard, *A Cooperative Strategy for 21st Century Seapower*, October 2007.

¹⁶⁴ Admiral Michael G. Mullen, Chief of Naval Operations, United States Navy, *The U.S. Navy Beyond Iraq—Sea Power for a New Era*, The Brookings Institution, Washington, DC, April 3, 2007, pp. 10-11.

threats, including acts of terrorism, piracy, and other criminal or unlawful or hostile acts committed by State and non-state actors. Partners will share 'best practices' and help to build Partner capacity while respecting national sovereignty and the exercise of freedom of navigation.

- Transparency of the maritime domain enhances security at sea. Transparency at sea means actors who wish to exploit unprotected maritime areas and harm the international economic system may not hide. Safer seas translate into reduced risks and lower overhead costs for international business.
- International organizations have a vital role in maritime security issues, including the International Maritime Organization, the World Customs Organization, and the International Labor Organization. Effective implementation of international and national security standards and programs...also play a vital role in promoting maritime security.
- This approach recognizes the primacy of existing systems, regional coalitions, and encourages inclusion and diplomatic efforts while seeking to share 'best practices.' It provides partners the framework to think globally, while acting regionally.¹⁶⁵

Despite these concepts being fleshed out in at least some U.S. thinking, GMP does not appear to have advanced beyond the concept stage since it was first proposed over three years ago. There have been no meetings in its name, no identification of partner nations, no exercises or other training conducted as GMP activities, no official statement of principles. Some loose, voluntary structure modeled on PSI's appears critical to make that happen. Further, although Admiral Mullen has often said publicly that GMP will be more successful if not American-led, there seems little likelihood of turning the concept into reality absent U.S. leadership.

One possibility might be to expand PSI regional meetings to encompass GMP as well. That could help advance both initiatives, among other things by helping to attract countries that have been reluctant to participate in PSI *per se*, but would see value in broader-based naval cooperation. There is also a risk that the opposite would happen: that some states interested in GMP would refuse involvement if it is too closely associated with PSI. However, that risk will be worth running if the PSI link is the only—or at a minimum, the most likely—means to translate the GMP concept into action. In any case, the bulk of potential GMP partners also participate in PSI. It would be both fruitless and counterproductive to pretend that the two drew on substantially different resources. If GMP is to become reality, it must be a partner, not an alternative or a competitor, with PSI.

Cooperation Against Arms Smuggling to Gaza

The program of action agreed upon in March 2009 by eight states to stop arms smuggling in the Gaza Strip offers a different, but still close, application of the PSI model. A central point of difference with PSI is the very specific focus of the planned cooperation: to help prevent a resumption of hostilities in Gaza by shutting off the flow of arms into the region. In another difference from PSI, the program involves relatively few states, all of whom are NATO members and active PSI partners.¹⁶⁶ The program of action does not envision adding other states to the group, although it refers throughout to support of regional efforts. Israel was an observer at the meetings that developed the action program; Egypt and the Palestinian Authority were invited, but chose not to participate.

The substantive elements of the action program, however, are directly reminiscent of PSI. The purpose is "to enhance efforts to prevent and interdict the illicit trafficking of arms, ammunition and weapons

¹⁶⁵ Initiative on Security and Globalization Effects, Naval Postgraduate School, *Global Maritime Partnerships (GMP)*, at <http://www.sagecenter.net/node/9>.

¹⁶⁶ Canada, Denmark, France, Germany, Italy, Netherlands, Norway and the United States.

components to Gaza and within their jurisdiction to prevent the facilitation of such transfers.” Specific characteristics include: voluntary action; cooperative actions involving only some participants; use of existing national and international legal authorities; and enhanced information sharing.¹⁶⁷

Another important, PSI-like characteristic of the effort is the speed with which the action program was developed. Israel and Hamas instituted cease-fires in Gaza on January 18, 2009. Two days before, the United States and Israel signed an MOU regarding measures “to stem the flow of weapons and explosives into Gaza.”¹⁶⁸ According to the Israeli press, the MOU included, *inter alia*, an agreement to “work cooperatively with neighbors and in parallel with others in the international community to prevent the supply of arms and related material to terrorist organizations that threaten either party, with a particular focus on the supply of arms, related material and explosives into Gaza to Hamas and other terrorist organizations.”¹⁶⁹ Two weeks later, on February 5, the Danish Government hosted a workshop on how to stop the arms trafficking into Gaza. Attendees were: Canada, France, Germany, Italy, Netherlands, Norway, Spain, United Kingdom and United States.¹⁷⁰ Just over a month later, all the participants in the Copenhagen workshop except Spain agreed on the action program. The participants continue to meet frequently; a follow-up meeting reportedly was held in April 2009, and another was planned for June 2009.¹⁷¹

It is too early to begin to judge the effectiveness of this effort to stop illicit arms shipments into Gaza. However, the basic approach—applying the PSI model to specific requirements for immediate international action—may hold considerable promise in this and other areas.

Financial Action Task Force

The FATF is much more structured than PSI, resembling in several respects the export control regimes discussed in Chapter 1. The FATF has a formal decisionmaking process to promulgate recommendations and standards against money laundering and terrorist financing, and to identify “non-cooperative countries and territories” (NCCTs) that fail to meet standards. It also has a central secretariat and detailed membership criteria. The FATF does not strive to be universal, but instead to group states who are important to international finance, able and willing to follow the FATF standards and recommendations.¹⁷²

On the other hand, the FATF Secretariat is miniscule by international organization standards—just 10 people, housed administratively at the Organization for Economic Cooperation and Development in Paris. The only other structure is provided by a President (a one-year term, held by a senior official from a FATF member) and Vice-President (the next President). Furthermore, through close ties with relevant elements

¹⁶⁷ Foreign and Commonwealth Office, *Anti-Smuggling Conference—Final Communiqué (16/03/2009)*, at <http://www.fco.gov.uk/en/newsroom/latest-news>.

¹⁶⁸ U.S. Department of State, Media Note, Office of the Spokesman, Washington, DC, *U.S.-Israel Sign Memorandum of Understanding Regarding Prevention of the Supply of Arms and Related Materials to Terrorist Groups*, January 16, 2009, at <http://2001-2009.state.gov/r/pa/prs/ps/2009/01/115022.htm>.

¹⁶⁹ “Text of U.S.-Israel agreement to end Gaza arms smuggling,” *Haaretz Service*, 17 January 2009, at <http://www.haaretz.com>.

¹⁷⁰ Kim McLaughlin, “Ways to stop Gaza arms smuggling aired at meeting,” *Reuters*, 05 February 2009, at <http://www.alertnet.org/thenews/newsdesk/L5794298.htm>.

¹⁷¹ Personal communication, June 2009.

¹⁷² See Appendix J for the FATF membership policy.

of the United Nations and with “FATF-style regional bodies” (FSRBs) throughout the world, the FATF has global reach; it claims to set standards and recommendations for 170 jurisdictions. In addition, the FATF membership criteria resemble in large part a statement of principles, although, in keeping with the FATF mission, compliance is required.

The FATF and FSRBs conduct regular multilateral peer reviews of states’ progress in implementing the FATF recommendations. In what is in essence a capacity-building process, the FATF provides a road map whereby NCCTs can meet its standards and recommendations. The FATF describes the NCCT process as very successful; “[a]ll 23 jurisdictions identified as NCCTs in 2003 and 2001 are no longer on the NCCT list as they have made significant progress.”¹⁷³

Each year, the FATF holds three plenary meetings and a meeting of experts on typologies, and may hold various intersessional and *ad hoc* meetings. The typologies meeting is usually held jointly with an FSRB. From July 2008-June 2009, actual and planned intersessional and *ad hoc* meetings included evaluator training seminars, meetings of the working groups on evaluation and implementation and on terrorism financing and money laundering. FSRBs have a comparable mix of plenary and working group meetings. All FATF and FSRB meetings are closed to the public.¹⁷⁴

Finally, despite its formal decisionmaking structure, the FATF can move much more quickly than most international organizations or regimes. In April 1990, less than one year after the FATF’s creation, it issued the *Forty Recommendations*, a comprehensive action plan against money laundering. Expansion of the FATF work to include terrorist financing happened even more quickly. On October 5, 2001, less than a month after 9/11, the FATF announced that it would hold an extraordinary plenary on October 29-30 “to address initiatives to combat terrorist financing... to ensure that the international financial system cannot be misused by terrorists and those who channel funds to them.” That plenary meeting issued the Special Recommendations on Terrorist Financing,¹⁷⁵ and an action plan “to secure the swift and effective implementation of these new standards.” States were given just nine months, until June 2002, to come into compliance.¹⁷⁶

Still, while the FATF reacted quickly and decisively to the events of September 11, it still *reacted*, rather than being proactive on the terrorist financing problem. The requirement for consensus among a diverse group of states may have prevented it from moving before the 9/11 attacks demanded a strong response. The same phenomenon may be involved in the FATF’s work on proliferation financing. In June 2008, the

¹⁷³ Financial Action Task Force, *NCCT Initiative*, at <http://www.fatf-gafi.org>.

¹⁷⁴ Financial Action Task Force, *FATF-XX Events under the Brazilian Presidency 1 July 2008-30 June 2009 (as at January 2009)*, at <http://www.fatf-gafi.org>.

¹⁷⁵ The “Special Recommendations... commit members to:

- Take immediate steps to ratify and implement the relevant United Nations instruments.
- Criminalize the financing of terrorism, terrorist acts and terrorist organizations.
- Freeze and confiscate terrorist assets.
- Report suspicious transactions linked to terrorism.
- Provide the widest possible range of assistance to other countries’ law enforcement and regulatory authorities for terrorist financing investigations.
- Impose anti-money laundering requirements on alternative remittance systems.
- Strengthen customer identification measures in international and domestic wire transfers.
- Ensure that entities, in particular non-profit organizations, cannot be misused to finance terrorism.”

Financial Action Task Force on Money Laundering, “FATF Cracks Down on Terrorist Financing,” Washington, 31 October 2001, *FATF Press Releases*, at <http://www.fatf-gafi.org>.

¹⁷⁶ *Loc. cit.*

FATF Plenary published a new study on proliferation financing, the work of a project team dominated by PSI OEG members.¹⁷⁷ The report responded to a June 2007 FATF Plenary directive for a study of measures under UNSCR 1540 to combat proliferation finance.¹⁷⁸ Thus the study was mandated more than three years after the passage of UNSCR 1540, and the report followed one year later. The contrast with the speed of the FATF actions against terrorism finance is striking.

The Proliferation Financing Report is forthright that “proliferation financing poses a real and ongoing threat to the international financial system,” and that “[e]ffective proliferation financing prohibitions is one of several important elements that contribute to a jurisdiction’s effective and comprehensive counter proliferation regime.”¹⁷⁹ It concludes by identifying a series of possible measures, in four categories: legal (e.g., criminalization, targeted financial sanctions); awareness (e.g., outreach to the financial sector on proliferation risks); prevention (e.g., implementing and enhancing AML/CFT controls); and investigation (e.g., providing financial intelligence to proliferation investigations). These steps are all carefully couched as “issues for further consideration,” not as recommendations.¹⁸⁰

In April 2008, shortly before the publication of the Proliferation Financing Report, FATF Ministers approved a revised mandate identifying directions and priorities for the Task Force through 2012. For the first time, the revised mandate included work on proliferation finance, but in very careful terms:

2. The FATF, since its establishment, has focused its work on three main activities: standard setting, ensuring effective compliance with the standards and identifying money laundering and terrorist financing threats. These activities will remain at the core of the FATF’s work for the remainder of this mandate. Going forward, the FATF will build on this work and respond to new and emerging threats, such as proliferation financing....

12. Globalisation has created potential new risks as criminals and terrorists seek to penetrate the global financial system. The FATF will remain at the centre of international efforts to protect the integrity of the financial system and will respond to the significant new threats emerging which are related to, but may fall outside its core activities. The FATF will only consider limited expansions of its field of action where it has a particular additional contribution to make.

13. Proliferation financing is a current example of an area where the FATF can add value to the wider efforts of the international community and, consistent with the needs identified by the UN

¹⁷⁷ Financial Action Task Force, *Proliferation Financing Report*, 18 June 2008, at <http://www.fatf-gafi.org>. Project team members were: Belgium, Canada, Denmark, France, Germany, Hong Kong, Italy, Netherlands, Switzerland, United Kingdom, United Nations, and United States.

¹⁷⁸ The bulk of the June 2007 guidance concerned not the study of potential counterproliferation measures, but implementation of the financial sanctions and prohibitions in UNSCRs 1718, 1737 and 1747 on Iran and North Korea. Still, it took the FATF several months to develop the guidance on UNSCRs 1718 and 1737, both of which passed in 2007. The FATF issued further guidance on the financial prohibitions of UNSCR 1737 in October 2007. Financial Action Task Force, *Guidance Regarding the Implementation of Financial Provisions of United Nations Security Council Resolutions to Counter the Proliferation of Weapons of Mass Destruction*, 29 June 2007; and Financial Action Task Force on Money Laundering, *Guidance Regarding the Implementation of Activity-Based Financial Prohibitions of United Nations Security Council Resolution 1737*, 12 October 2007; both at <http://www.fatf-gafi.org>.

¹⁷⁹ *Ibid.*, pp. 47-48.

¹⁸⁰ *Ibid.*, pp. 47-50.

Security Council Resolutions, the FATF will continue to work on this issue. In doing so, the FATF will ensure that it does not duplicate existing efforts elsewhere.¹⁸¹

The FATF has not taken any subsequent actions regarding proliferation, except to issue further guidance regarding Iranian financial sanctions and prohibitions after the passage of UNSCR 1803 in March 2008. Again, it took the FATF several months to promulgate the guidance.¹⁸²

The different records of the FATF regarding terrorist and proliferation finance amply demonstrate that a shared commitment to common principles and goals is critical to effective action—whether by the FATF, or by other “global issues networks” or efforts to emulate the PSI model. Once states agreed to combat money laundering by drug traffickers, FATF could be created and issue detailed recommendations in a short time. Taking advantage of its decade-long history and habits of action, the Task Force could act even more quickly after 9/11 inspired comparable agreement to cut off terrorist financing. Absent such a consensus against WMD and missile proliferation, FATF has been unable to act in the area—except to help implement the UNSC actions against Iran and North Korea and (not unimportantly) to provide, in the *Proliferation Financing Report*, detailed guidelines for future, broader actions if and when the member states decide to go that route.¹⁸³

Given the slowness and/or paucity of the FATF work against proliferation financing, PSI partners probably should heighten efforts within PSI to address the issue—for example, by establishing a financial break-out group of the OEG. At the same time, the many PSI partners in the FATF should continue to encourage the Task Force to play the same strong role against proliferation financing as it has against terrorist financing.

World Association of Nuclear Operators

WANO is a voluntary global network in the service of common goals—unique because its members are not governments *per se*, but nuclear power plant operators. (Of course, in many countries, the nuclear operators are government entities.) As in the FATF case, the definition and recognition of the goals underlying the effort came in reaction to crisis. In the United States, the Institute of Nuclear Power Operations (INPO) was created after the 1979 accident at Three Mile Island, charged with establishing high safety standards for the entire U.S. nuclear power industry. In 1987, 30 of the 32 countries with nuclear power plants operating or under construction agreed to emulate on an international scale the successful INPO model, in order to help prevent another catastrophic accident like the one in April 1986 at Chernobyl. It still took two years to establish WANO. The first meeting was in May 1989, fittingly in Moscow. At that time, 144 nuclear operating companies signed the WANO Charter, committing to support the organization’s mission to improve nuclear power plant safety.¹⁸⁴

Unlike PSI and even FATF, WANO has a significant organizational structure, staffed by direct-hire employees and detailees from member organizations. There is a central Coordinating Center in London, and regional centers in Atlanta, Moscow, Paris and Tokyo. A Governing Board, composed of the WANO

¹⁸¹ Financial Action Task Force, *FATF Revised Mandate 2008-2012*, 12 April 2008, at <http://www.fatf-gafi.org>.

¹⁸² See p. 34 above for a discussion of UNSCR 1803, and the other UNSC Resolutions against Iran’s nuclear program.

¹⁸³ Thus, FATF work against terrorist finance merits very high scores on all four of Rischarde’s criteria for global issues network success: speed; redefining legitimacy on a global scale; diversity; and compatibility with traditional institutions. But its work thus far against proliferation has earned low scores.

¹⁸⁴ World Association of Nuclear Operators, *Key Events in WANO’s History*, at <http://www.wano.org.uk>.

Chairman (elected for a two-year term) and two representatives from each WANO region, usually meets three times a year. Except for the Chairman, all Governing Board members are officials at member utilities. The General Assembly, grouping all members, meets every two years. "The regional centres are semi-autonomous, with their own regional governing boards, but they work closely together as a team to ensure an exchange of ideas and a consistent implementation of WANO policies."¹⁸⁵

WANO has three categories of members: ordinary, joint and associate. There are 37 ordinary members, representing all countries with nuclear power plants in operation or under construction.¹⁸⁶ Ordinary members normally represent all nuclear operators in their country or area; they alone have voting rights at general meetings. Individual utilities are usually joint members. The four regional centers are associate members. Ordinary members may belong to one or more regional centers, and have access to information from all of them.¹⁸⁷

WANO conducts four primary programs: peer reviews; exchange of operating experience; technical support and exchange; and professional and technical development. Peer reviews of both plants and companies are conducted by international teams from other WANO member utilities. The goal is at least one WANO peer review at each plant every six years, with outside reviews (WANO or otherwise) every three years. Follow-up reviews address implementation of initial recommendations. The number of WANO peer reviews has risen steadily over the years; 43 were planned for 2007, the last year for which public data on WANO activities are available.¹⁸⁸

In the second program, WANO members "learn from each others' specific experiences...enabl[ing] them to take action to prevent similar events from happening at their own." Affected plants report and analyze individual events, "defined as any significant deviation from the normal expected functioning of a plant." Nine hundred thirty-six events were reported in 2006. Depending on the severity of the event, WANO will issue Significant Operating Experience Reports (outlining actions members should implement) or Significant Event Reports (with lessons learned to reduce the chances of similar events).¹⁸⁹

The technical support and exchange program includes peer technical support missions, development of performance indicators, issuance of good practices and guidelines, and staff visits between plants. Here too the numbers have risen steadily. As of mid-2007, almost 600 technical support missions had been held, with over 80 in 2007 alone.¹⁹⁰ Finally, WANO fosters professional and technical developments "through workshops, seminars, expert meetings and training courses." WANO regional centers arranged 60 such events in 2005-2006, and WANO held its first global plant managers' conference in 2006.¹⁹¹

¹⁸⁵ World Association of Nuclear Operators, *WANO Review 2007*, p. 16.

¹⁸⁶The ordinary members are from: Argentina, Armenia, Belgium, Brazil, Bulgaria, Canada, China, Cuba, Czech Republic, Finland, France, Germany, Hungary, India, Iran, Italy, Japan, Kazakhstan, Korea, Lithuania, Mexico, Netherlands, Pakistan, Poland, Romania, Russia, Slovak Republic, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, Ukraine, United Kingdom and United States.

¹⁸⁷ World Association of Nuclear Operators, *WANO Review 2007*, p. 17.

¹⁸⁸ *Ibid.*, p. 6; and John Ales, *World Association of Nuclear Operators: ATOMCON, Moscow 2008*, Slide 10.

¹⁸⁹ World Association of Nuclear Operators, *WANO Review 2007*, p. 8.

¹⁹⁰ *Ibid.*, p. 11.

¹⁹¹ *Ibid.*, p. 12.

WANO has been successful, in its global reach, steady program growth and increases in nuclear plant safety and reliability.¹⁹² WANO differs from the PSI model in major respects: its members are industries rather than governments, and its staff and organization are relatively large and structured. However, it shares other essential characteristics with PSI: highly-developed peer cooperation, sustained preventive action, and rapid response—all in the service of well-defined, shared goals.¹⁹³

World Institute for Nuclear Security

WINS, established in September 2008, aims to do for nuclear security what WANO has achieved for nuclear power plant safety. Thus, WINS describes its mission as:

...to provide an international forum for nuclear security professionals to discuss and exchange good security practice and to learn from one another.... The ultimate objective for WINS is to improve the effectiveness and efficiency of security arrangements for nuclear materials and reduce the chance of nuclear terrorism through the sharing and promotion of good practices amongst security officials.¹⁹⁴

Consistent with national responsibilities for nuclear security, WINS strives to include members from government and the private sector. Grants from the U.S. Department of Energy, the Government of Norway and NTI provide its initial funding. Over time, WINS hopes to become financially self-sufficient, like WANO, largely through member dues. WINS also plans a rather traditional organizational structure, with “a Board of Directors that provides strategic direction and corporate governance and an Advisory Council to provide specialist support and guidance,” an Executive Director in Vienna, and a staff that will start small (at about five) but is expected to grow.¹⁹⁵

In contrast to PSI, the Global Initiative and Rischard’s concept for global issues networks, WINS appears to be moving slowly, focused initially on organization rather than action. Six months after its establishment, WINS reported no members, two staff, one designated staff member, and three staff vacancies. In a strong suggestion that WINS little resembles PSI, its web site in March 2009 stated that it “has to exist as a legal entity before membership can be open so it is inevitable that the formation of WINS precedes membership.”¹⁹⁶ Instead of being an “activity not an organization,” WINS appeared to focus on being an organization before being an activity.

By May 2009, WINS had started to move forward. It was open to governmental, organizational and individual members, although it did not publicly list any members. It also held a first workshop, in the United Kingdom on May 5-8, 2009, focused on nuclear security management best practices.¹⁹⁷ WINS

¹⁹² For safety and reliability data, see World Association of Nuclear Operators, *op. cit.*, and Ales, *op. cit.*

¹⁹³ Perhaps at least in part because of its complex organization, WANO would win low marks for Rischard’s “speed” criterion at its inception, but now responds quickly when nuclear power plant management or operation issues arise. Within its very specific community, WANO also merits high scores for diversity, redefining global legitimacy, and compatibility with traditional institutions. Although it may seem inappropriate to describe as diverse an organization composed exclusively of nuclear power plant operators, WANO’s membership covers the full range of plant designs and completely diverse, sometimes antithetical, political systems.

¹⁹⁴ World Institute for Nuclear Security, *The World Institute for Nuclear Security: Frequently Asked Questions*, <http://www.wins.org/faq.htm>.

¹⁹⁵ *Ibid.*

¹⁹⁶ *Ibid.*

¹⁹⁷ *Ibid.*

issued a Code of Conduct in March 2009; unlike the PSI Statement of Principles, however, the WINS Code is almost entirely procedural rather than substantive, focused on maintaining confidentiality of information exchanged in WINS discussions and cooperation.¹⁹⁸ WINS is entirely voluntary and aims to be flexible, with individual work programs structured to meet members' needs and requirements. Likely subjects and activities include exercises, performance testing, application of best security practices, including from other sectors, and operational reviews.

Thus, it remains possible that WINS will abandon its initial slow, bureaucratic approach in favor of outreach and action.¹⁹⁹ The contrast between PSI's achievements in its first six months, and the paucity of WINS' activities, underscore the value of the PSI model.

Conclusion

The likelihood of full and exact replication of the PSI model in other international security areas appears to be low. Indeed, insistence on following a detailed "PSI template" would be inconsistent with the basic thrust of the Initiative, with its emphasis on flexibility and adaptability. The one element of the model that must be present in all cases is, appropriately, the most basic: commitment by a core group of states or responsible organizations to take action to advance shared goals. Those shared goals must be sufficiently detailed and operational to permit and encourage implementing action.

In that broader sense, the "PSI model"—with its focus on cooperative action in the service of shared goals—appears to be very much the wave of the future. PSI was not the first such effort, but it has been the most successful, measured by breadth of support, speed of implementation, importance of aims, and depth of international cooperation. Success in this new approach to international security requirements breeds success, as evidenced in the use of the PSI model for the creation of the Global Initiative to Combat Nuclear Terrorism.

The process is not necessarily smooth, as can be seen in the slow FATF progress on proliferation finance and the WINS initial focus on organizational issues at the expense of substance. But the international community does appear increasingly convinced of the need for action to implement and advance established norms. In the process, early fears that efforts like PSI would undermine the formal treaty and agreement structure have virtually disappeared. Instead, there is a new understanding that innovative, active approaches to implementation and enforcement are critical to the long-term viability of existing, and potentially future, treaties and agreements.

In turn, PSI and other new initiatives built on the need for action must by definition maintain—and if possible, increase—their momentum. They also must counter any "initiative fatigue" by participants. Government officials are accustomed to constantly developing and evolving calls for action on the national level to meet new or changing requirements. They must adjust to the same demands on the international level. Existing and likely future WMD and missile proliferation threats ensure there will be a long-term requirement for constant, ever-changing action to counter them. The challenge will be to meet that requirement.

¹⁹⁸ World Institute for Nuclear Security, *Members' Code of Conduct and Confidentiality*, at http://www.wins.org/doc/pdf/WINS_code_of_conduct.pdf.

¹⁹⁹ In the interim, WINS merits a failing grade for Rischard's speed criterion and, consequently, a near zero for his three other criteria.

Chapter 6

Findings and Recommendations

This chapter summarizes key findings and recommendations of this study regarding: the WMD and missile proliferation threat; the future evolution of PSI; and other applications of the PSI model for international security cooperation.

Proliferation Threat and Response

Findings

The nonproliferation regime created by traditional agreements and activities—including legally binding treaties, political commitments, United Nations mandates, and assistance programs—has had a major impact in constraining the spread of WMD and missile delivery systems. Nevertheless, despite the success of these measures, the proliferation threat is today, and will be for the foreseeable future, more dangerous and more complex than in the past. States like Iran and North Korea openly defy the international community in pursuing WMD and longer-range missiles. Terrorist organizations actively seek WMD and could not likely be deterred from using them. Unscrupulous traders and governments are eager to sell prohibited materials and technology as long as the price is right. Advances in commercial, dual-use technologies facilitate worldwide proliferation production and commerce.

Recommendations

The traditional nonproliferation regime must be maintained, and strengthened to the extent possible. To cite a few examples:

- All states should adopt the Additional Protocol, substantially increasing the IAEA's ability to detect clandestine nuclear programs;
- The NSG should enhance constraints on transfers of enrichment and reprocessing technology;
- UNSCR 1540, and the various resolutions on Iran and North Korea, should be fully implemented;
- The G8 Global Partnership should be expanded—in funds, donors, and recipients—to reduce WMD threats worldwide.

While steps such as those are essential, they are and will remain insufficient. New, more flexible, more active and responsive means to counter proliferation are required. Those must involve as many relevant states as possible, and draw on the varied resources of both governments (diplomatic, military, intelligence, law enforcement, border security, etc.) and the private sector.

Enhancing the Proliferation Security Initiative

Findings

PSI is one of the most important international initiatives responding to those new requirements. It has been extraordinarily successful in a short period of time, judging by a number of critical measures: the extent of its international support; counterproliferation capacity-building; cooperation in training exercises;

intelligence sharing; law enforcement and actual interdictions. However, several improvements to PSI are not only possible, but necessary. PSI must be continuously strengthened if it is to remain successful, and it must counter two long-term, potentially damaging trends: the creativity of proliferators in finding new ways to elude measures by PSI partners; and the risk of reduced partner enthusiasm and momentum.

Recommendations

- **General**

Leading PSI partners must periodically reaffirm their commitment to the Initiative, in highly visible public fashion. It will be particularly important that the Obama Administration continue to make clear that it is at least as committed to PSI as its predecessor. All other PSI partners, including the most active, will take their cues from the United States, and will devote full attention to the Initiative only if the United States does so.

- **Membership**

Vigorous outreach efforts should continue to expand PSI membership, concentrating on: the leading current non-participants (Brazil, China, Egypt, India, Indonesia, Malaysia, Pakistan and South Africa); other coastal states in Asia; and the seriously underrepresented regions of Africa and South America. Currently active PSI partners should be encouraged to maintain their momentum. Less active states possessing strong capabilities and/or facing particular proliferation threats should escalate their involvement; Saudi Arabia and Russia are two important examples.

Further, all PSI states with the requisite ability should significantly increase their individual and collective efforts to help other partners enhance their counterproliferation capabilities. Such activity should take a variety of forms—for example, provision of equipment under the U.S. CTR and other G-8 Global Partnership assistance programs; joint exercises and other training. It should also extend to the full range of PSI cooperation: military capacity-building will be very important, but so too will be such measures as intelligence collection and sharing, legal and regulatory development and enforcement, financial controls, and border security.

- **Structure**

The OEG should be expanded to as many as 30 members, primarily to secure better regional representation. The optimal means for such expansion would be through the addition to PSI of the leading non-participants mentioned above, as well as South Korea. The OEG should fully implement the nascent concept of holding more regional meetings that include non-OEG members. While that improved regional focus and involvement would be an important improvement to the current PSI structure, the OEG should continue to hold at least one plenary meeting a year, especially because of the transregional nature of most proliferation trade.

Renewed attention to PSI high-level political meetings will be essential to maintain strong senior-level support for the Initiative. That support, in turn, will be critical to maintain momentum and a sense of partnership. Because plenary meetings of all PSI partners inevitably would be largely ceremonial, consideration should be given to one annual plenary and at least one annual policy meeting in each region.

Some minimal structure for PSI could help ensure that the schedule of, and participation in, meetings, exercises, etc. remain strong. The May 2009 decision to establish a single PSI focal point is a welcome

step. If it is necessary or desirable to go further, one useful approach might be a rotating chairmanship, with a “troika” composed of the current, immediate past, and next presidency country. A very small secretariat to ensure information flow might also be possible. While such changes might help improve PSI, it will be essential to avoid any bureaucratization of the effort. Actions must remain voluntary; votes must not be required; meetings must be designed to facilitate and encourage, not to substitute for, action.

- **Information Sharing**

PSI should create an analogue to the Information Portal established for the Global Initiative to Combat Nuclear Terrorism, to enhance information sharing among partners. Initially the mechanism could be used primarily for simple, but essential, procedural and logistics information (for example, regarding future exercises and meetings) as well as a repository for key members-only data, such as after-action “lessons learned” reports. Over time, a PSI information portal might expand to include more sensitive information, although that would necessarily be least common denominator and could never supplant more substantial, regular or situation-specific intelligence exchanges between partners.

PSI should also improve substantially public information about its activities. A dedicated public web site should be created and kept up-to-date, and partners should make a concerted effort to release more data about their PSI activities. Intelligence and operational security concerns undoubtedly will continue to constrain the amount of information that can be made public about actual interdictions, but there is certainly more that can be disseminated.

- **Budget**

Until now, PSI activities have been funded from regular, non-dedicated appropriations. Over time, that arrangement understandably could lessen governments’ or key government elements’ willingness to undertake expensive PSI activities, such as operational exercises. For the United States, the Obama Administration should request annual PSI budgets, either for all involved U.S. Government agencies, or for DOD alone with full transfer authority. Care should be taken to ensure that such an appropriation would facilitate increased PSI activity, and in no way inhibit or delay the ability to engage in interdiction and other operations which by their nature cannot be predicted in advance.

- **Legal Framework**

Efforts to strengthen the legal foundation for PSI interdictions should be accelerated and expanded. Six strands are particularly important:

- All partners should be encouraged to review and, where appropriate, enhance relevant national laws, regulations and enforcement. To help that process, PSI might adopt multilateral peer review practices comparable to those of FATF.
- Sustained outreach efforts should aim at securing PSI participation by all coastal states worldwide, except those (e.g., Iran and North Korea) that clearly do not honor their international nonproliferation obligations or adhere to PSI’s underlying principles.
- The United States, and possibly other PSI partners, should complete ship-boarding agreements with remaining flag states.
- The United States should ratify the 2005 SUA Protocol and urge all PSI partners to do the same.
- The United States and other partners should join Australia in pressing for a comparable amendment to the Montreal Convention, to prohibit air shipment of WMD and missile proliferation cargoes.

- The United States and other partners should place a high priority on the thorough and successful implementation of UNSCR 1874, with its unprecedented support for interdiction of WMD- and missile-related shipments to and from North Korea.

Applying the PSI Model

Findings

PSI offers an important model for cooperation in other international security areas. In keeping with the flexibility and adaptability that are PSI hallmarks, there is not, and should not be, a detailed PSI template for other issue areas. Instead, the PSI model, at its most fundamental, simply requires a commitment among partners to action in the service of shared goals. Those goals must be sufficiently detailed and operational to allow and encourage real action.

If the PSI model is defined in that broad sense, it appears likely to be applied increasingly in the near future. Successful efforts of this type tend to inspire expansion and/or emulation. Several actual or planned activities are especially worthy of mention:

- Global Initiative to Combat Nuclear Terrorism—established in July 2006; consciously modeled on PSI.
- Global Maritime Partnership—has not moved beyond concept stage since its announcement in 2005; aim would be to apply PSI model to maritime threats in general.
- Cooperation to prevent arms smuggling into Gaza Strip—agreed in March 2009; PSI-like activity in very specific area.
- Financial Action Task Force—founded in 1989; expanded to counter terrorist finance in 2001; has considered, but done little in, countering proliferation finance.
- World Association of Nuclear Operators—founded in 1989; cooperation among nuclear power plant operators to ensure high safety worldwide.
- World Institute for Nuclear Security—founded in September 2008; modeled on WANO, but still organizing more than acting.

Recommendations

The Global Initiative to Combat Nuclear Terrorism has been successful, but would be further strengthened if it developed an analogue to the PSI OEG, to focus and encourage training and other capacity building. Its Information Portal is a model that PSI should emulate, but the Global Initiative needs even more than PSI to improve and expand substantially public information about its activities and plans.

It is too early to evaluate the recently-agreed cooperation to stem the smuggling of conventional arms into Gaza. However, the concept is promising, as is the overall approach of applying the PSI model to very specific cases that, if successful, would also be of short duration. This is not to suggest that the PSI model is not at least as relevant to broader issues, but instead that its application may be productive in a variety of differing cases.

WANO demonstrates that PSI-style cooperation may also be very useful in the private sector, or between both public and private sectors, in specific issue areas. It is still too early to pass judgment on WINS, but its initial record strongly suggests that it needs to draw some lessons from PSI and pay much more attention to action and less to organization.

FATF shares many characteristics with PSI, and has had an extraordinary impact where it has been able to act. However, the requirement for consensus before action has been a serious constraint on FATF's ability to expand into countering proliferation finance. Consequently, PSI partners should seek as much as possible to foster FATF-style standards and controls among themselves. The "issues for consideration" in the FATF Proliferation Financing Report provide an excellent guide to action.

Two areas appear to be promising, if challenging, candidates for future application of the PSI model: promoting public health while preventing biological weapons proliferation; and promoting civil nuclear energy while preventing nuclear weapons proliferation. Both efforts would seek to make much more widely available the benefits of dual-use biological and nuclear material and technology, but in a manner that helps to counter proliferation. That combination of basic principles and focus on a broad definition of the public good should help facilitate the support for action-oriented shared principles that is the fundamental requirement of the PSI model.

Appendix A

Acronyms and Abbreviations

| | |
|-------|---|
| AG | Australia Group |
| AML | Anti-Money Laundering |
| BTRP | Biological Threat Reduction Program |
| BW | Biological Weapons |
| BWC | Biological and Toxin Weapons Convention |
| CBRN | Chemical, Biological, Radiological, Nuclear |
| CDC | Centers for Disease Control and Prevention |
| CFT | Counter-Terrorist Financing |
| CIA | Central Intelligence Agency |
| CPX | Command Post Exercise |
| CRS | Congressional Research Service |
| CTR | Cooperative Threat Reduction |
| CW | Chemical Weapons |
| CWC | Chemical Weapons Convention |
| DOD | U.S. Department of Defense |
| EPR | Epidemic and Pandemic Alert and Response |
| FATF | Financial Action Task Force |
| FSRB | FATF-Style Regional Body |
| GMP | Global Maritime Partnership |
| GOARN | Global Outbreak Alert and Response Network |
| IAEA | International Atomic Energy Agency |
| ICAO | International Civil Aviation Organization |
| IHR | International Health Regulations |
| INPO | Institute of Nuclear Power Operations |
| IPC | Interagency Policy Committee |
| LIVEX | Live Exercise |
| MOU | Memorandum of Understanding |
| MTCR | Missile Technology Control Regime |

| | |
|--------|---|
| NBC | Nuclear, Biological, Chemical |
| NCCT | Non-Cooperative Countries and Territories |
| NDU | National Defense University |
| NGO | Non-Governmental Organization |
| NNWS | Non-Nuclear Weapons State |
| NPT | Nuclear Nonproliferation Treaty |
| NSC | National Security Council |
| NSG | Nuclear Suppliers Group |
| NSPD | National Security Presidential Directive |
| NTI | Nuclear Threat Initiative |
| NWS | Nuclear Weapons State |
| ODNI | Office of the Director of National Intelligence |
| OEG | Operational Experts Group |
| OEWG | Operational Experts Working Group |
| OPCW | Organization for the Prohibition of Chemical Weapons |
| PCC | Policy Coordinating Committee |
| PSI | Proliferation Security Initiative |
| SUA | Protocol of 2005 to the amended Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation |
| UN | United Nations |
| UNCLOS | United Nations Convention on the Law of the Sea |
| UNSC | United Nations Security Council |
| UNSCR | United Nations Security Council Resolution |
| WA | Wassenaar Arrangement |
| WANO | World Association of Nuclear Operators |
| WHO | World Health Organization |
| WINS | World Institute for Nuclear Security |
| WMD | Weapons of Mass Destruction |
| ZC | Zangger Committee |

Appendix B

Nonproliferation Agreements and States Parties

| <u>Country</u> | <u>NPT & NSG</u> ²⁰⁰ | <u>MTCR</u> ²⁰¹ | <u>AG</u> ²⁰² | <u>CWC</u> ²⁰³ | <u>BWC</u> ²⁰⁴ |
|----------------|-------------------------------------|----------------------------|--------------------------|---------------------------|---------------------------|
| Argentina | X* | X | X | X | X |
| Australia | X* | X | X | X | X |
| Austria | X* | X | X | X | X |
| Belarus | X | | | X | X |
| Belgium | X* | X | X | X | X |
| Brazil | X | X | | X | X |
| Bulgaria | X* | X | X | X | X |
| Canada | X* | X | X | X | X |
| China | X* | | | X | X |
| Croatia | X* | | X | X | X |
| Cyprus | X | | X | X | X |
| Czech Republic | X* | X | X | X | X |
| Denmark | X* | X | X | X | X |
| Estonia | X | | X | X | X |
| Finland | X* | X | X | X | X |
| France | X* | X | X | X | X |
| Germany | X* | X | X | X | X |
| Greece | X* | X | X | X | X |
| Hungary | X* | X | X | X | X |
| Ireland | X* | X | X | X | X |
| Italy | X* | X | X | X | X |
| Japan | X* | X | X | X | X |
| Kazakhstan | X* | | | X | X |
| Latvia | X | | X | X | X |
| Lithuania | X | | X | X | X |
| Luxembourg | X* | X | X | X | X |
| Malta | X | | X | X | X |
| Netherlands | X* | X | X | X | X |
| New Zealand | X | X | X | X | X |
| Norway | X* | X | X | X | X |
| Poland | X* | X | X | X | X |

²⁰⁰ 190 countries are currently party to the Nuclear Nonproliferation Treaty; 45 countries are Nuclear Suppliers Group members. An asterisk (*) indicates that country is also a Zangger Committee member.

²⁰¹ 34 countries are currently members of the Missile Technology Control Regime.

²⁰² 40 countries and the European Commission are currently members of the Australia Group.

²⁰³ 188 countries are currently party to the Chemical Weapons Convention.

²⁰⁴ 163 countries are currently party to the Biological and Toxin Weapons Convention.

| | | | | | |
|----------------|----|---|---|---|---|
| Portugal | X* | X | X | X | X |
| Romania | X* | | X | X | X |
| Russia | X* | X | | X | X |
| Slovakia | X* | | X | X | X |
| Slovenia | X* | | X | X | X |
| South Africa | X* | X | | X | X |
| South Korea | X* | X | X | X | X |
| Spain | X* | X | X | X | X |
| Sweden | X* | X | X | X | X |
| Switzerland | X* | X | X | X | X |
| Turkey | X* | X | X | X | X |
| Ukraine | X* | X | X | X | X |
| United Kingdom | X* | X | X | X | X |
| United States | X* | X | X | X | X |

Appendix C

United Nations Security Council Resolution 1540

United Nations Security Council
28 April 2004

Resolution 1540

Adopted by the Security Council at its 4956th meeting, on 28 April 2004

The Security Council,

Affirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery, constitutes a threat to international peace and security,²⁰⁵

Reaffirming, in this context, the Statement of its President adopted at the Council's meeting at the level of Heads of State and Government on 31 January 1992 (S/23500), including the need for all Member States to fulfill their obligations in relation to arms control and disarmament and to prevent proliferation in all its aspects of all weapons of mass destruction,

Recalling also that the Statement underlined the need for all Member States to resolve peacefully in accordance with the Charter any problems in that context threatening or disrupting the maintenance of regional and global stability,

Affirming its resolve to take appropriate and effective actions against any threat to international peace and security caused by the proliferation of nuclear, chemical and biological weapons and their means of delivery, in conformity with its primary responsibilities, as provided for in the United Nations Charter,

Affirming its support for the multilateral treaties whose aim is to eliminate or prevent the proliferation of nuclear, chemical or biological weapons and the importance for all States Parties to these treaties to implement them fully in order to promote international stability,

Welcoming efforts in this context by multilateral arrangements which contribute to non-proliferation,

²⁰⁵ Definitions for the purpose of this resolution only:

Means of delivery: missiles, rockets and other unmanned systems capable of delivering nuclear, chemical, or biological weapons that are specially designed for such use.

Non-State actor: individual or entity, not acting under the lawful authority of any State in conducting activities which come within the scope of this resolution.

Related materials: materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included on national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and their means of delivery.

[Note: The above footnote is in the original UNSCR 1540 text, noted by an asterisk.]

Affirming that prevention of proliferation of nuclear, chemical and biological weapons should not hamper international cooperation in materials, equipment and technology for peaceful purposes while goals of peaceful utilization should not be used as a cover for proliferation,

Gravely concerned by the threat of terrorism and the risk that non-State actors such as those identified in the United Nations list established and maintained by the Committee established under Security Council resolution 1267 and those to whom resolution 1373 applies, may acquire, develop, traffic in or use nuclear, chemical and biological weapons and their means of delivery,

Gravely concerned by the threat of illicit trafficking in nuclear, chemical, or biological weapons and their means of delivery, and related materials, which adds a new dimension to the issue of proliferation of such weapons and also poses a threat to international peace and security,

Recognizing the need to enhance coordination of efforts on national, subregional, regional and international levels in order to strengthen a global response to this serious challenge and threat to international security,

Recognizing that most States have undertaken binding legal obligations under treaties to which they are parties, or have made other commitments aimed at preventing the proliferation of nuclear, chemical or biological weapons, and have taken effective measures to account for, secure and physically protect sensitive materials, such as those required by the Convention on the Physical Protection of Nuclear Materials and those recommended by the IAEA Code of Conduct on the Safety and Security of Radioactive Sources,

Recognizing further the urgent need for all States to take additional effective measures to prevent the proliferation of nuclear, chemical or biological weapons and their means of delivery,

Encouraging all Member States to implement fully the disarmament treaties and agreements to which they are party,

Reaffirming the need to combat by all means, in accordance with the Charter of the United Nations, threats to international peace and security caused by terrorist acts,

Determined to facilitate henceforth an effective response to global threats in the area of non-proliferation,

Acting under Chapter VII of the Charter of the United Nations,

1. *Decides that* all States shall refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery;
2. *Decides also* that all States, in accordance with their national procedures, shall adopt and enforce appropriate effective laws which prohibit any non-State actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery, in particular for terrorist purposes, as well as attempts to engage in any of the foregoing activities, participate in them as an accomplice, assist or finance them;
3. *Decides also* that all States shall take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, including by establishing appropriate controls over related materials and to this end shall:

-
- (a) Develop and maintain appropriate effective measures to account for and secure such items in production, use, storage or transport;
- (b) Develop and maintain appropriate effective physical protection measures;
- (c) Develop and maintain appropriate effective border controls and law enforcement efforts to detect, deter, prevent and combat, including through international cooperation when necessary, the illicit trafficking and brokering in such items in accordance with their national legal authorities and legislation and consistent with international law;
- (d) Establish, develop, review and maintain appropriate effective national export and trans-shipment controls over such items, including appropriate laws and regulations to control export, transit, trans-shipment and re-export and controls on providing funds and services related to such export and trans-shipment such as financing, and transporting that would contribute to proliferation, as well as establishing end-user controls; and establishing and enforcing appropriate criminal or civil penalties for violations of such export control laws and regulations;
4. *Decides* to establish, in accordance with rule 28 of its provisional rules of procedure, for a period of no longer than two years, a Committee of the Security Council, consisting of all members of the Council, which will, calling as appropriate on other expertise, report to the Security Council for its examination, on the implementation of this resolution, and to this end calls upon States to present a first report no later than six months from the adoption of this resolution to the Committee on steps they have taken or intend to take to implement this resolution;²⁰⁶
5. *Decides* that none of the obligations set forth in this resolution shall be interpreted so as to conflict with or alter the rights and obligations of State Parties to the Nuclear Non-Proliferation Treaty, the Chemical Weapons Convention and the Biological and Toxin Weapons Convention or alter the responsibilities of the International Atomic Energy Agency or the Organization for the Prohibition of Chemical Weapons;
6. *Recognizes* the utility in implementing this resolution of effective national control lists and calls upon all Member States, when necessary, to pursue at the earliest opportunity the development of such lists;
7. *Recognizes* that some States may require assistance in implementing the provisions of this resolution within their territories and invites States in a position to do so to offer assistance as appropriate in response to specific requests to the States lacking the legal and regulatory infrastructure, implementation experience and/or resources for fulfilling the above provisions;
8. *Calls upon* all States:
- (a) To promote the universal adoption and full implementation, and, where necessary, strengthening of multilateral treaties to which they are parties, whose aim is to prevent the proliferation of nuclear, biological or chemical weapons;
- (b) To adopt national rules and regulations, where it has not yet been done, to ensure compliance with their commitments under the key multilateral nonproliferation treaties;
- (c) To renew and fulfill their commitment to multilateral cooperation, in particular within the framework of the International Atomic Energy Agency, the Organization for the Prohibition of Chemical Weapons and

²⁰⁶ UNSCR 1673 extended the mandate of the 1540 Committee for two years (until April 27, 2008) and UNSCR 1810 extended it for another three years (until April 25, 2011).

the Biological and Toxin Weapons Convention, as important means of pursuing and achieving their common objectives in the area of non-proliferation and of promoting international cooperation for peaceful purposes;

(d) To develop appropriate ways to work with and inform industry and the public regarding their obligations under such laws;

9. *Calls upon* all States to promote dialogue and cooperation on nonproliferation so as to address the threat posed by proliferation of nuclear, chemical, or biological weapons, and their means of delivery;

10. Further to counter that threat, *calls upon* all States, in accordance with their national legal authorities and legislation and consistent with international law, to take cooperative action to prevent illicit trafficking in nuclear, chemical or biological weapons, their means of delivery, and related materials;

11. *Expresses* its intention to monitor closely the implementation of this resolution and, at the appropriate level, to take further decisions which may be required to this end;

12. *Decides* to remain seized of the matter.

Appendix D

Concluding Statements at PSI Political-Level Meetings²⁰⁷

Chairman's Statement at the First Meeting

Foreign Ministry of Spain
Madrid, Spain
June 12, 2003

The International Community is deeply concerned by the proliferation of weapons of mass destruction (WMD) and related materials, as well as by the risk that these may fall into the hands of terrorists. There exists a wide-spread consensus that this menace, together with terrorism, constitutes the greatest challenge to International Security.

In this context, the Government of Spain hosted a meeting of countries on June 12, where, building on the Proliferation Security Initiative announced by U.S. President Bush May 31 in Krakow, participants agreed on the need to take more active measures to stop the flow of WMD and missiles to and from states and non-state actors of proliferation concern. Participants recalled G-8 efforts, including the Global Partnership Against the Proliferation of Weapons of Mass Destruction, and the EU Strategy and Action Plan against Proliferation of Weapons of Mass Destruction.

The group included Australia, France, Germany, Italy, Japan, Netherlands, Poland, Portugal, Spain, the United Kingdom, and the United States.

All agreed that proliferation of weapons of mass destruction, their means of delivery, and related materials and equipment is a serious threat to national and international security and that trafficking in these items by certain countries or non-state actors must be stopped.

They agreed to assess existing national authorities under which such practical measures could be pursued, and to encourage the various export control regimes to take this Initiative into account in strengthening the regimes.

They expressed the desire to broaden support for and, as appropriate, participation in the Proliferation Security Initiative to include all countries that are prepared to play a role in preventing this dangerous commerce, and that can contribute to proactive measures to interdict shipments.

²⁰⁷ Texts as reported by U.S. Department of State, <http://www.state.gov/t/isn/115302.htm> et seq. and <http://www.state.gov/t/isn/115495.htm>. Typographical errors in the State Department texts have been corrected here.

Chairman's Statement at the Second Meeting

Foreign Ministry of Australia
Brisbane, Australia
July 10, 2003

The participants in the Proliferation Security Initiative (PSI) meeting in Brisbane on 9-10 July reiterated their strong political support for the Initiative, and underscored that the PSI is a global Initiative with global reach. They agreed to move quickly on direct, practical measures to impede the trafficking in weapons of mass destruction (WMD), missiles, and related items.

This was the second meeting of the eleven PSI countries. The first meeting was in Madrid on 12 June. Participants are Australia, France, Germany, Italy, Japan, Netherlands, Poland, Portugal, Spain, the UK, and the U.S.

The Madrid meeting was unanimous on the need to take active measures to stop the flow of WMD, missiles and related items to and from proliferators. This reflected the international alarm at the growing trade in WMD, missiles and related items, including the risk that these might fall into the hands of terrorists.

Under Australian chairmanship, the Brisbane meeting built in the results from the Madrid meeting and moved forward in translating the collective political commitment of PSI members into practical measures.

The Brisbane meeting focused on defining actions necessary to collectively or individually interdict shipments of WMD or missiles and related items at sea, in the air or on land. Participants emphasized their willingness to take robust and creative steps now to prevent trafficking in such items, while reiterating that actions taken would be consistent with existing domestic and international legal frameworks.

The Brisbane meeting made good progress in considering interdiction modalities, particularly in the information sharing and operational arenas. Participants emphasized that effective information sharing is vital to interdiction, and agreed to strengthen and improve capabilities for the exchange of information and analysis between participants as a basis for cooperative action to impede WMD and missile trade. Participants acknowledged that although interdiction efforts have been under way for some time, there is a need to further develop and enhance the capabilities of PSI nations to conduct actual air, ground and maritime interdiction operations in partnership against WMD and delivery systems. To that end, they agreed in principle to the concept of a series of interdiction training exercises, utilizing both military and civilian assets as appropriate, and that such exercises should take place as soon as practicable.

Participants agreed on the importance of building a broad and effective partnership of countries prepared to play a part in disrupting and stopping the trafficking in WMD, missiles and related items. They agreed effective implementation of the PSI will require the active involvement of countries around the world. As the PSI moves forward, they aim to involve all countries that have the will and ability to take action to address this menace. It also will be crucial to involve countries that are key flag, coastal or transit states, and others that are used by proliferators in their WMD and missile trafficking efforts.

Participants underlined that the spread of weapons of mass destruction, their means of delivery, and related materials and equipment is a serious threat to national, regional and global security. Participants expressed concern that WMD and missiles are increasingly being acquired by states of concern which reject international standards against the acquisition, use and proliferation of such weapons.

PSI participants considered the question of states and non-state actors of proliferation concern. They referred to the relevant statements of the G-8 Evian summit on 1-3 June and the EU-U.S., Joint Statement on the Proliferation of Weapons of Mass Destruction of 25 June which addressed countries of proliferation concern and non-state actors with particular reference to North Korea and Iran.

The Brisbane meeting strongly supported the strengthening of the existing framework of national laws and export controls, multilateral treaties and other tools which remain the international community's main means for preventing the spread of WMD and missiles. They emphasized that the increasingly aggressive and sophisticated efforts by proliferators to circumvent or thwart existing non-proliferation norms, and to profit from the trade of WMD and missiles or related items, requires new and stronger enforcement action by law-abiding nations. The PSI was therefore welcomed as a necessary and innovative approach to the problem of countries which cheat on their international obligations, refuse to join existing regimes or do not follow international norms, and for non-state actors seeking to acquire WMD.

Participants acknowledged that the PSI is a fast-track Initiative that will require continued interaction among experts and policy makers in the days and weeks ahead, and agreed to a next high-level meeting in early September.

Chairman's Statement at the Third Meeting²⁰⁸

Foreign Ministry of France
Paris, France
September 4, 2003

Participants in the Proliferation Security Initiative (PSI) met in Paris on 3rd and 4th September under French chairmanship. This informal meeting was the third of its kind, after Madrid on 12 June and Brisbane (Australia) on 9-10 July. Representatives of 11 countries took part: Germany, Australia, Spain, United States, France, Italy, Japan, Netherlands, Poland, Portugal, and the United Kingdom.

The PSI is an Initiative to develop political commitments and practical cooperation to help impede and stop the flow of WMD (weapons of mass destruction), their delivery systems, and related materials to and from states and non-State actors of proliferation concern. It is a dynamic process.

Participants affirmed that the PSI is consistent with and a step in the implementation of the UN Security Council Presidential Statement of 31 January 1992, which states that the proliferation of all WMD constitutes a threat to international peace and security, and underlines the need to prevent proliferation. It is also in line with the Kananaskis and Evian G-8 Summit declarations as well as recent EU (European Union) statements, establishing that more coherent and concerted efforts are needed to prevent the proliferation of WMD, their delivery systems, and related materials.

They pointed out that this Initiative is consistent with international law, as well as national legal authorities. The Chair recalled the primary responsibility of the UN Security Council, under the UN Charter, for the maintenance of international peace and security.

²⁰⁸ The Chairman's Statement at the Third Meeting was issued at the same time as the Statement of Interdiction Principles.

It is part of the overall effort in support of nonproliferation which is a pillar of collective security and strategic stability. It can contribute among other tools to the full implementation of and compliance with commitments under this regime, in particular multilateral nonproliferation agreements.

It can also help to reduce the risk of WMD falling into the hands of terrorists.

Participants reaffirmed their commitment not to play any role themselves in proliferation activities and to take effective measures, either individually or in cooperation with partners, to stop them.

Participants reviewed a broad range of political, legal, practical, technical and operational aspects, with a view to paving the way for early concrete outcomes.

They agreed on a "Statement of interdiction principles." It is released today in the spirit of transparency. The "Statement of interdiction principles" identifies concrete actions to collectively or individually interdict shipments of WMD, their delivery systems and related materials.

Participants expressed the hope that all countries which share their nonproliferation concerns and objectives, in particular coastal and transshipment States, flag States, and other partners in the international community, will support this Initiative.

They expressed their willingness to engage in outreach activities, by rapidly opening dialogue with other countries and seeking their views and comments. They stand ready to review and take into account inputs which would enhance their proposed efforts.

Participants also considered practical steps to improve and enhance interdiction activities, including sharing of information among partners, and confirmed the organization of maritime, air and ground interdiction training exercises in the coming months, aimed at enhancing existing capabilities for implementation of the PSI.

They decided to meet again in October in London to review the progress of the Initiative.

Chairman's Conclusions at the Fourth Meeting

Foreign and Commonwealth Office
London, United Kingdom
October 10, 2003

Participants in the Proliferation Security Initiative (PSI) met at Lancaster House, London, on 9-10 October. Australia, France, Germany, Italy, Japan, Netherlands, Poland, Portugal, Spain, the UK and the U.S. were represented. The meeting was preceded on 8 October by an air interception command post exercise (CPX) organized by the UK.

The London meeting was the fourth meeting of the PSI, consolidating and building on the foundations laid at Madrid (12 June); Brisbane (9-10 July); and Paris (3-4 September).

Outreach

Following the publication of the Statement of Interdiction Principles on 4 September 2003, PSI participants approached other countries to seek their support for the Statement, and their views on how they might contribute to the Initiative.

Participants agreed that the response had been very encouraging. The Initiative had been well received. Over 50 countries had already expressed support for the Statement of Principles.

It was agreed that further co-ordinated outreach work would be needed to broaden international understanding of and co-operation with the Initiative. In this context, further regionally based meetings and activities would be valuable. In this regard the meeting welcomed planned efforts in the Asian region by Japan and Australia. The possibility was discussed of inviting additional participants to specific PSI exercises or other activities, on an ad hoc basis.

Participation

The meeting agreed that the PSI was a global Initiative with an inclusive mission. Successful interdiction of trafficking in WMD (weapons of mass destruction), their delivery systems and related materials requires the widest possible co-operation between states. Participation in the PSI, which is an activity not an organization, should be open to any state or international body that accepts the Paris Statement of Principles and makes an effective contribution.

The meeting noted that participation would vary with the activity taking place, and the contribution participants could provide. Some countries had particular experience, assets or expertise relevant to all PSI activities; other countries or organizations could be expected to contribute according to their particular capabilities.

It was noted that a number of countries which had expressed particularly keen interest in participating in future PSI activities and meetings had experience and capabilities which would be of value to the Initiative, and which should be taken into account in future decision making.

Focus of efforts

The Statement of Interdiction Principles, agreed at Paris in September, outlines the scope of the Initiative. It makes clear that "States or non-state actors of proliferation concern" generally refers to those countries or entities that the PSI participants involved establish should be subject to interdiction activities because they are engaged in proliferation through: (1) efforts to develop or acquire chemical, biological, or nuclear weapons and associated delivery systems; or (2) transfers (either selling, receiving or facilitating) of WMD, their delivery systems, or related materials.

Participants agreed that the Initiative aimed to impede and stop trafficking of WMD, their delivery systems and related materials by any state or non-state actors engaged in or supporting WMD proliferation programmes, at any time and in any place.

WMD is a global threat which calls for a global response. Participants looked forward to working with all concerned states on developing the specific measures they were able and willing to take in support of the PSI.

Operational matters

Participants had an initial exchange of views on a possible Boarding Agreement, presented by the U.S., which could facilitate practical implementation of the Initiative. They agreed that participants should make comments as rapidly as possible, so that states which are interested can move forward with concluding the agreement.

Participants agreed that future interdiction exercises should build on the successful exercises that have already taken place: an Australian-led maritime interdiction training exercise in the Coral Sea in September, and a UK-led air interception command post exercise in London. Future exercises should seek to integrate civil, military, and law enforcement decision making as appropriate.

The meeting agreed further steps to plan training exercises that will take place in the coming months:

- Spanish led maritime interdiction training exercise in the Mediterranean, 14-17 October;
- French led maritime interdiction training exercise in the Mediterranean, 24-28 November;
- Italian led air interception training exercise, 3-4 December;
- U.S. led maritime interdiction training exercise in the Arabian Sea, January 2004;
- Polish led ground interdiction exercise, early 2004;
- Italian led maritime interdiction exercise in the Mediterranean, Spring 2004;
- French led air interception exercise, Spring 2004;
- German led interdiction exercise, at an international airport, March 2004.

It was noted that there could be lessons to be learnt from NATO's maritime interdiction operations.

Contacts with international organizations

Participants agreed that all relevant fora should be kept informed of significant developments under the Initiative. To this end, the chair of each PSI Plenary meeting should, as appropriate, circulate its conclusions.

Recalling the 1992 UN Security Council Presidential Declaration on the proliferation of WMD, the meeting noted the value of securing an expression of support in relevant international fora for greater international co-operation against trafficking in WMD, their delivery systems and related materials.

Future meetings

Concluding, the Plenary Chair noted that the broad direction of the PSI had now been agreed. Plenary meetings might therefore become less frequent. But exercises and expert discussion of specific operational and policy issues under the PSI umbrella would continue, with the broadest possible participation by states committed to PSI Principles and to making effective contributions.

The offer by the United States to host an operational experts' meeting in December was warmly welcomed. A number of countries, beyond the original 11 participants, that support the PSI Principles and have concrete contributions to make to PSI activities will take part in that meeting.

Participants warmly welcomed Portugal's offer to host the next PSI Plenary meeting in early 2004.

Chairman's Statement at the Fifth Meeting

Palacio Foz
Lisbon, Portugal
March 5, 2004

1. The fifth Plenary meeting of the Proliferation Security Initiative (PSI) took place at Palacio Foz, Lisbon, on March 4-5, 2004, building on deliberations at Madrid (June 12, 2003); Brisbane (July 9-10, 2003); Paris (September 3-4, 2003) and London (October 9-10, 2003). Australia, Canada, France, Germany,

Italy, Japan, Netherlands, Norway, Poland, Portugal, Singapore, Spain, the UK and the U.S. were represented.

2. The participants reaffirmed their strong determination to respond effectively to the threat represented by proliferation and trafficking of WMD (weapons of mass destruction), their delivery systems, and related materials worldwide. Recent developments leave no doubt as to the seriousness of the danger posed by such proliferation activities. The PSI (Proliferation Security Initiative) has been successful in raising worldwide awareness to this threat and in fostering the international cooperation that is required to stop WMD-related shipments as well as the proliferation networks. Trafficking in WMD constitutes a global threat to international peace and security. It is an unacceptable activity and should be addressed by all countries. If linked to terrorism, it can represent a random threat to anyone, in any continent.

3. Deterring trafficking is therefore in the interest of all peace-loving countries. The open nature of this Initiative is reiterated and the contributions from countries that share PSI concerns, principles and goals continue to be welcomed. This is a global endeavor with an inclusive nature and it relies on the widest possible cooperation between states from different parts of the world. Participants considered that geographical balance and regional diversity are assets that need to be preserved, as they represent an important added value to PSI effectiveness. In this spirit, the strengthened commitment of Canada, Norway, and Singapore to the PSI is warmly welcomed.

4. Participants supported the call by U.S. President Bush to expand the role of the PSI to not only interdict shipments of WMD, their delivery systems and related materials, but to cooperate in preventing WMD proliferation facilitators (i.e., individuals, companies, and other entities) from engaging in this deadly trade. They also warmly welcomed contributions by other participants namely the UK. Participants agreed to pursue greater cooperation through military and intelligence services and law enforcement to shut down proliferation facilitators and bring them to justice.

PSI participants agree to begin examining the key steps necessary for this expanded role, including:

- identifying national points of contact and internal processes developed for this goal;
- developing and sharing national analyses of key proliferation actors and networks, their financing sources, and other support structures;
- undertaking national action to identify law enforcement authorities and other tools or assets that could be brought to bear against efforts to stop proliferation facilitators.

Outreach

5. The participants agreed that it was essential to continue broadening the international consensus in favor of the fight against the proliferation of WMD, their delivery systems, and related materials, as well as to the widening of the international political and operational support for PSI aims and actions. This will be carried out notably by building on previous outreach activities (over 60 countries have expressed support for the Paris Statement of Interdiction Principles until now). This may also be done by concluding bilateral agreements with interested States, notably in view of obtaining their consent for expeditious procedures for the boarding of vessels flying their flag, as required. The first examples of such bilateral agreements seem to indicate that this is an approach that can bear fruit most rapidly and which participants could/should usefully pursue.

6. Regarding significant developments related to the fight against WMD-related trafficking, complementary efforts by all relevant international organizations and information sharing with such organizations should be pursued as appropriate.

7. Regional outreach activities have shown to be an effective awareness-raising tool. They provide a useful framework for enhancing the involvement in the PSI activities and create a link between its global aims and the various regional contexts. Participants are encouraged to host further meetings to present and promote the PSI along the lines of those organized by Japan and Poland. The Portuguese announcement of one such outreach meeting for the African continent was welcomed.

8. While continuing to promote wide support for the Initiative, participants agreed to focus their outreach efforts particularly on states that have potentially unique contributions to make to interdiction efforts (i.e., flag states, transshipment states, overflight states, transit states, and coastal states). The support of all countries interested in PSI and cooperation in interdiction is welcome and states are encouraged to consider the following practical steps that can establish the basis for involvement in PSI activities:

- Formally commit to and publicly endorse the PSI and its Statement of Interdiction Principles and indicate willingness to take all steps available to support PSI efforts.
- Undertake a review and provide information on current national legal authorities to undertake interdictions at sea, in the air or on land. Indicate willingness to strengthen authorities where appropriate.
- Identify specific national assets that might contribute to PSI efforts (e.g., information sharing, military and/or law enforcement assets).
- Provide points of contact for PSI interdiction requests and other operational activities. Establish appropriate internal government processes to coordinate PSI response efforts.
- Be willing to actively participate in PSI interdiction training exercises and actual operations as opportunities arise.
- Be willing to consider signing relevant agreements (e.g., boarding agreements) or to otherwise establish a concrete basis for cooperation with PSI efforts (e.g., MOU on overflight denial).

9. The participants discussed the proposed amendments to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA) that would criminalize the transport of weapons of mass destruction, their delivery systems, and related materials on commercial vessels at sea.

Operational Activities

10. The participants noted with satisfaction that the PSI is by now operationally active. They also recognized that specific, significant progress was thereby obtained in fighting proliferation activities and that PSI partners had contributed decisively to recently disclosed successes in the disruption or indeed dismantling of some previously covert WMD programs.

11. The meeting heard a report from the chairman of the operational experts meeting that took place in Washington, DC on December 16-17, 2003. It encouraged the operational experts to pursue their work at the meeting that was announced in Canada, to take place in April, notably in view of reaching conclusions on the improvement and rationalization of the PSI exercise program, providing for improved thematic and geographical balance, as well as on several other steps identified at the Washington meeting.

12. Training is required for operational effectiveness. Six exercises took place in different parts of the world since the launching of the PSI and further important operational activities are foreseen in the months to come. The Plenary took note with satisfaction that the UK, Australia, Spain, France, Italy, the U.S., Germany, and Poland, have organized or will organize PSI exercises. Other participants are encouraged to take similar initiatives, in the framework of a coordinated and rationalized exercise program.

13. The Plenary particularly drew the participants' attention to the fact that the attainment of the PSI goals requires continued efforts within the operational experts group to work through operational legal issues, as commenced at the Washington meeting. All countries are encouraged to take the necessary steps to improve their legal systems and practical tools to strengthen their capacity to effectively act as and when required to take action consistent with the PSI Statement of Interdiction Principles. Bearing in mind our common goals, appropriate consultations might be required in this regard.

Future of PSI

14. Not yet one year from the moment it was launched, the Proliferation Security Initiative has established itself as a crucial instrument to respond effectively to some of the most serious security challenges of the XXI century. This is reflected in the growing number of countries supporting the PSI. All participate in this sense in the Initiative and all their contributions are warmly welcomed. Just like proliferation can be a multifaceted phenomenon, the responses may have to be flexible and may need to take many shapes and forms.

15. PSI is an activity, not an organization. Progress since the London Plenary demonstrates that the main lines of the PSI are now well established and that several directions of action can be pursued separately but still in a mutually reinforcing mode. However, to further build the PSI as an activity, political vision and strategic guidance remain necessary. Further consideration shall be given to the suggestion of establishing a network of contact points at policy level among participants.

Next Meeting

16. To commemorate the anniversary of the launching of the PSI Poland offered to host a meeting in Krakow that will bring together all countries that support the PSI.

Chairman's Statement at the First Anniversary PSI Meeting

Foreign Ministry of Poland
Krakow, Poland
June 1, 2004

The First Anniversary Proliferation Security Initiative (the PSI) Meeting took place in Krakow, on 31 May-1 June 2004. The Meeting was to commemorate the first anniversary of launching the Initiative by the U.S. President, George W. Bush in his speech at the Wawel Royal Castle in Krakow, on 31 May 2003. Thus, the Proliferation Security Initiative will also be known as the Cracow Initiative.

The meeting brought together senior representatives from over 60 countries. The participation of a broad representation of countries across the globe in the Anniversary Meeting confirms the growing awareness of the danger of proliferation of Weapons of Mass Destruction, related materials and their means of delivery. It also highlights the worldwide support of the PSI and its Statement of Interdiction Principles.

The meeting was conducted under the patronage of Aleksander Kwasniewski, President of the Republic of Poland.

During the meeting the Addresses by the President of the Republic of Poland, Aleksander Kwasniewski and President of the United States of America, George W. Bush, were transmitted.

The aims of the meeting included emphasizing the PSI as a global initiative, further development of international support for the aims and objectives of the PSI, and promotion of broad international cooperation and participation in PSI activities. The Cracow Initiative is not about structure and organization, but operation and cooperation.

During one year the Proliferation Security Initiative has been transformed from a vision into an active network of partnership and practical cooperation. Common principles have been defined. Interdiction capabilities developed and tested. Regional activities undertaken.

During the meeting, a series of presentations on the nature of PSI, its prospects, character, future development and outreach efforts were made. A special emphasis was made on the extensive exercise program where many countries have actively participated.

It was stressed that the Proliferation Security Initiative is an important element in responding to the growing challenge posed by the proliferation of Weapons of Mass Destruction (WMD), their delivery systems, and related materials to or from states and non-state actors worldwide. It was further stressed that the PSI activities had to be consistent with national and international law and frameworks.

The PSI builds on efforts by the international community to prevent the proliferation of WMD, their delivery systems or related materials and complements existing treaties and regimes. It is consistent with newly adopted United Nation's Security Council Resolution 1540 (2004) of 28 April 2004. The UN Security Council Resolution states that the Council is "gravely concerned by the threat of illicit trafficking in nuclear, chemical or biological weapons and their means of delivery, and related materials". It calls upon all states "to take cooperation actions to prevent illicit trafficking in nuclear, chemical or biological weapons, their means of delivery and related materials."

The transparent nature of the PSI activities was reiterated and the contributions from countries that share PSI concerns, principles and goals were welcomed. An emphasis was made that the PSI is a global endeavour with an inclusive nature. It relies on the widest possible cooperation between states around the world. The meeting showed the willingness of strengthening and expanding this cooperation.

The meeting confirmed the importance of continued outreach efforts to build the PSI and make it harder for proliferators to engage in this deadly trade. States participating were welcomed to engage in such cooperation as well as to undertake national action to identify law enforcement authorities and other tools or assets that could be brought to bear against efforts to stop proliferation facilitators.

Chairman's Statement at High-Level Political Meeting

Foreign Ministry of Poland
Warsaw, Poland
June 23, 2006

Members of the international community from around the globe gathered on 23rd June 2006 in Warsaw at the invitation of the Government of Poland to reaffirm publicly their strong commitment to the Proliferation Security Initiative (Cracow PSI), the PSI Statement of Interdiction Principles, and the goal of proactively combating WMD-related trafficking.

This gathering of nations is a resounding testament to the combined will and cooperative spirit of the international community of nations to work together to prevent the proliferation of weapons of mass destruction, their delivery systems, and related materials to states and non-state actors of proliferation concern. This gathering further demonstrates the consensus of the international community that the

nexus of the proliferation of weapons of mass destruction and terrorism constitutes one of the gravest dangers to the global community and demands constant vigilance. This gathering supports enhanced cooperation against proliferation networks and implementation of innovative measures, which will not only stop the transfer of these dangerous items but also act as a deterrent against those who would seek to facilitate such proliferation activities.

The Proliferation Security Initiative was announced on May 31st, 2003 in Cracow. Today, a few short weeks after only the third anniversary of the Initiative, participants noted that much has been accomplished, and that PSI is globally recognized as making an important contribution to international efforts to address the security threats posed by WMD and missile proliferation.

First, the Proliferation Security Initiative and the Statement on Interdiction Principles have provided an effective platform, consistent with national legal authorities and relevant international law and frameworks, for impeding and stopping the trafficking in weapons of mass destruction and their means of delivery. The PSI Participating States note in this context that UN Security Council resolution 1540 (2004) calls upon all states, in accordance with their national legal authorities and legislation and consistent with international law, to take cooperative action to prevent illicit trafficking in nuclear, chemical or biological weapons, their means of delivery, and related materials.

Second, the network of PSI participating states is constantly expanding across the globe. In just three years, the number of states that have expressed support for the PSI Principles and have committed to actively supporting interdiction efforts whenever necessary has increased to more than 75. PSI participating states now hail from every region of the world and, most importantly, from the regions of greatest concern for WMD-related trafficking. This is a vital accomplishment, because the national legal authorities and operational capabilities of PSI participating states serve as the basis for successful interdictions.

Third, PSI participating states have greatly improved their national capacities to interdict shipments of proliferation concern. Over the last three years, countries have undertaken robust efforts to:

- Proactively identify and use existing laws to conduct interdictions, and strengthen laws where necessary,
- Improve interdiction capabilities through multinational training efforts such as live exercises and gaming exercises,
- Improve their national organization for decision-making and operational execution in support of PSI interdictions,
- Establish relationships with key industries to facilitate their cooperation on PSI interdictions, and
- Continue to reach out to those states that have yet to endorse the PSI Statement of Interdiction Principles and to ensure that all PSI participating states can achieve the full benefits of involvement in the Initiative.

Finally, PSI is achieving results. Like-minded nations, working cooperatively, have utilized their national legal authorities and international legal frameworks to successfully stop shipments of WMD- and missile-related materials that, had they reached their destination and end-use would have aided states and possibly non-state actors of proliferation concern in the development of weapons of mass destruction.

During this meeting, PSI participating states focused on deepening their on-going efforts in all these regards. They stressed the importance of maintaining the operational focus and nature of the PSI Operational Experts process and further developing its regional dimension. They also discussed the efforts of several PSI participating states to disrupt the financial mechanisms that support proliferators. They concluded that each participant should consider how their own national laws and authorities might

be utilized or strengthened to identify, track or freeze the assets and transactions of WMD proliferators and their supporters. In addition, the PSI participating states undertook to explore how PSI states can work cooperatively to prevent and disrupt proliferation finance, in furtherance of their obligations under UNSCR 1540 and 1673.

PSI partners will continue to work together toward the objective of stopping the trafficking in WMD, their delivery systems, and related materials. They will also continue to work with those nations that have yet to indicate their support for the PSI, to further broaden the reach of willing partners. PSI Participants recognized that their actions under the PSI in preventing the spread of WMD-related material are having a positive impact on the world in which we live.

Washington Declaration for 5th Anniversary Senior-Level Meeting

Office of the Spokesman
Department of State
Washington, DC
May 28, 2008

The Proliferation Security Initiative (PSI) is a multinational activity directed at preventing the trafficking of weapons of mass destruction (WMD), their means of delivery, and related materials to and from states and non-state actors of proliferation concern. It is a partnership of states working together to develop a broad range of legal, diplomatic, economic, military, law enforcement, and other tools to interdict shipments of WMD-related items of proliferation concern.

The PSI participating states met in Washington, DC, on May 28, 2008 to mark the fifth anniversary of the Initiative, announced on May 31, 2003, in Krakow, Poland. They gathered to assess the PSI and discuss new ideas for strengthening international cooperation to stop WMD proliferation-related trafficking. They also took note of the previous senior-level meetings in 2004 and 2006 that helped in building support for PSI objectives.

The 91 PSI participating states have endorsed the September 4, 2003 PSI Statement of Interdiction Principles, also known as the "Paris Principles". Today, the PSI participating states recommit to and reaffirm the value of implementing those Principles.

The PSI participating states recognize the challenges posed by proliferators seeking to develop WMD and their means of delivery in violation of international regimes and national and international law, as well as by those who facilitate WMD proliferation. The PSI participating states are determined to identify and disrupt proliferation networks that circumvent export controls and regulatory systems, and take advantage of the conveniences of the global trading system to engage in proliferation-related activities. The PSI participating states reaffirm that their actions to stop the trafficking of WMD, their means of delivery, and related materials shall be consistent with national legal authorities and relevant international laws and frameworks.

The PSI participating states will continue to focus their efforts on preventing the movement of cargoes of WMD proliferation concern, including through cooperation with industry, and ultimately to seize such cargoes and dispose of them in a secure manner. They are committed to the timely and accurate exchange of information between relevant PSI partners concerning suspected proliferation activity.

To achieve the above objectives, the PSI participating states will dedicate appropriate efforts to strengthen their own national capabilities to conduct interdictions and their interagency coordination mechanisms to support interdiction-related decision-making. They recommit to engage in practical

cooperation on interdiction, based on sovereign decisions. They will work together to seek solutions to outstanding legal questions, such as the disposition of detained cargo, that may result from interdiction actions.

The PSI participating states will continue their efforts to strengthen interdiction capabilities needed to prevent and stop WMD proliferation effectively, including through participation in PSI-related exercises and other activities, through strengthening export controls in states of origin, and through strengthening transshipment controls. They will also strengthen their operational cooperation, with special emphasis on the regional dimension, to identify and address region-specific proliferation challenges. They will work together to distribute general information on PSI and capacity-building knowledge in the counterproliferation area as widely as possible among all PSI participating states.

The PSI participating states are committed to the full implementation of UN Security Council Resolution (UNSCR) 1540 and note that participation in the PSI is one effective way to fulfill operational paragraph 10 of UNSCR 1540. They are ready to assist in implementing this resolution's requirements, including its requirement to take and enforce effective measures to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, and in continuing to assist in building national capacity.

The PSI participating states recognize their responsibility, as states actively committed to the fight against WMD proliferation, to implement fully and effectively the relevant UN Security Council resolutions intended to stop WMD proliferation. The PSI participating states appreciate these resolutions' role in strengthening the international legal framework against WMD proliferation.

Recalling their commitment made in the PSI Statement of Interdiction Principles to work to strengthen when necessary relevant international law and frameworks in appropriate ways, the PSI participating states note additional results achieved:

- The provisions on preventing and stopping WMD-related proliferation contained in the Protocol of 2005 to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA). States that have signed the 2005 SUA Protocol are encouraged to work toward ratifying it.
- The efforts of the International Civil Aviation Organization to consider criminalizing the illicit international transport by air of WMD, their means of delivery, and related materials, so as to prevent and impede WMD proliferation-related trafficking by air.
- The work being done by the Financial Action Task Force (FATF) to develop ways to prevent the financing of proliferation activities. The PSI participating states will take into consideration guidance issued by the FATF relevant to the PSI.

The PSI participating states encourage endorsement of the Statement of Interdiction Principles and participation in the PSI by all states that are committed to preventing the proliferation of WMD, their means of delivery, and related materials.

Appendix E

PSI Statement of Interdiction Principles

Proliferation Security Initiative: Statement of Interdiction Principles

Paris

4 September 2003

The Proliferation Security Initiative (PSI) is a response to the growing challenge posed by the proliferation of weapons of mass destruction (WMD), their delivery systems, and related materials worldwide. The PSI builds on efforts by the international community to prevent proliferation of such items, including existing treaties and regimes. It is consistent with and a step in the implementation of the UN Security Council Presidential Statement of January 1992, which states that the proliferation of all WMD constitutes a threat to international peace and security, and underlines the need for member states of the UN to prevent proliferation. The PSI is also consistent with recent statements of the G8 and the European Union, establishing that more coherent and concerted efforts are needed to prevent the proliferation of WMD, their delivery systems, and related materials. PSI participants are deeply concerned about this threat and of the danger that these items could fall into the hands of terrorists, and are committed to working together to stop the flow of these items to and from states and non-state actors of proliferation concern.

The PSI seeks to involve in some capacity all states that have a stake in nonproliferation and the ability and willingness to take steps to stop the flow of such items at sea, in the air, or on land. The PSI also seeks cooperation from any state whose vessels, flags, ports, territorial waters, airspace, or land might be used for proliferation purposes by states and non-state actors of proliferation concern. The increasingly aggressive efforts by proliferators to stand outside or to circumvent existing non-proliferation norms, and to profit from such trade, requires new and stronger actions by the international community. We look forward to working with all concerned states on measures they are able and willing to take in support of the PSI, as outlined in the following set of "Interdiction Principles.":

Interdiction Principles for the Proliferation Security Initiative

PSI participants are committed to the following interdiction principles to establish a more coordinated and effective basis through which to impede and stop shipments of WMD, delivery systems, and related materials flowing to and from states and non-state actors of proliferation concern, consistent with national legal authorities and relevant international law and frameworks, including the UN Security Council. They call on all states concerned with this threat to international peace and security to join in similarly committing to:

1. Undertake effective measures, either alone or in concert with other states, for interdicting the transfer or transport of WMD, their delivery systems, and related materials to and from states and non-state actors of proliferation concern. "States or non-state actors of proliferation concern" generally refers to those countries or entities that the PSI participants involved establish should be subject to interdiction activities because they are engaged in proliferation through: (a) efforts to develop or acquire chemical, biological, or nuclear weapons and associated delivery systems; or (b) transfers (either selling, receiving, or facilitating) of WMD, their delivery systems, or related materials.

2. Adopt streamlined procedures for rapid exchange of relevant information concerning suspected proliferation activity, protecting the confidential character of classified information provided by other states as part of this Initiative, dedicate appropriate resources and efforts to interdiction operations and capabilities, and maximize coordination among participants in interdiction efforts.

3. Review and work to strengthen their relevant national legal authorities where necessary to accomplish these objectives, and work to strengthen when necessary relevant international laws and frameworks in appropriate ways to support these commitments.

4. Take specific actions in support of interdiction efforts regarding cargoes of WMD, their delivery systems, or related materials, to the extent their national legal authorities permit and consistent with their obligations under international law and frameworks, to include:

a. Not to transport or assist in the transport of any such cargoes to or from states or non-state actors of proliferation concern, and not to allow any persons subject to their jurisdiction to do so.

b. At their own initiative, or at the request and good cause shown by another state, to take action to board and search any vessel flying their flag in their internal waters or territorial seas or areas beyond the territorial seas of any other state that is reasonably suspected of transporting such cargoes to or from states or non-state actors of proliferation concerns, and to seize such cargoes that are identified.

c. To seriously consider providing consent under the appropriate circumstances to the boarding and searching of its own flag vessels by other states and to the seizure of such WMD-related cargoes in such vessels that may be identified by such states.

d. To take appropriate actions to (1) stop and/or search in their internal waters, territorial seas, or contiguous zones (when declared) vessels that are reasonably suspected of carrying such cargoes to or from states or non-state actors of proliferation concern and to seize such cargoes that are identified; and (2) to enforce conditions on vessels entering or leaving their ports, internal waters or territorial seas that are reasonably suspected of carrying such cargoes, such as requiring that such vessels be subject to boarding, search, and seizure of such cargoes prior to entry.

e. At their own initiative or upon the request and good cause shown by another state, to (1) require aircraft that are reasonably suspected of carrying such cargoes to or from states or non-state actors of proliferation concern and that are transiting their airspace to land for inspection and seize any such cargoes that are identified; and/or (2) deny aircraft reasonably suspected of carrying such cargoes transit rights through their airspace in advance of such flights.

f. If their ports, airfields, or other facilities are used as transshipment points for shipment of such cargoes to or from states or non-state actors of proliferation concern, to inspect vessels, aircraft, or other modes of transport reasonably suspected of carrying such cargoes, and to seize such cargoes that are identified.

Appendix F PSI Membership

States Now Endorsing the Statement of Interdiction Principles²⁰⁹

| | | |
|-------------------|------------------|----------------------|
| Afghanistan | Greece | Papua New Guinea |
| Albania | Holy See | Paraguay |
| Andorra | Honduras | Philippines |
| Angola | Hungary | Poland |
| Argentina | Iceland | Portugal |
| Armenia | Iraq | Qatar |
| Australia | Ireland | Romania |
| Austria | Israel | Russia |
| Azerbaijan | Italy | Samoa |
| Bahamas | Japan | Saudi Arabia |
| Bahrain | Jordan | San Marino |
| Belarus | Kazakhstan | Serbia |
| Belgium | Kuwait | Singapore |
| Belize | Kyrgyzstan | Slovakia |
| Bosnia | Latvia | Slovenia |
| Brunei Darussalam | Liberia | South Korea |
| Bulgaria | Libya | Spain |
| Cambodia | Liechtenstein | Sri Lanka |
| Canada | Lithuania | Sweden |
| Chile | Luxembourg | Switzerland |
| Croatia | Macedonia | Tajikistan |
| Cyprus | Malta | Tunisia |
| Czech Republic | Marshall Islands | Turkey |
| Denmark | Moldova | Turkmenistan |
| Djibouti | Mongolia | Ukraine |
| El Salvador | Montenegro | United Arab Emirates |
| Estonia | Morocco | United Kingdom |
| Fiji | Netherlands | United States |
| Finland | New Zealand | Uzbekistan |
| France | Norway | Vanuatu |
| Georgia | Oman | Yemen |
| Germany | Panama | |

²⁰⁹ Current as of May 26, 2009. Source: U.S. Department of State, <http://www.state.gov/t/isn/c27732.htm>.

Members of Operational Experts Group

Argentina
Australia
Canada
Denmark
France
Germany
Greece

Italy
Japan
Netherlands
New Zealand
Norway
Poland
Portugal

Russia
Singapore
Spain
Turkey
United Kingdom
United States

Appendix G

PSI Operational Experts Group Meetings²¹⁰

Plenary Meetings

| | |
|------------------------------|------------------------|
| July 9-10, 2003 | Brisbane, Australia |
| July 30, 2003 | London, United Kingdom |
| September 3-4, 2003 | Paris, France |
| October 8-10, 2003 | London, United Kingdom |
| December 16-17, 2003 | Washington, DC |
| April 16-17, 2004 | Ottawa, Canada |
| August 5-6, 2004 | Oslo, Norway |
| November 30-December 2, 2004 | Sydney, Australia |
| March 21-22, 2005 | Omaha, Nebraska |
| July 6-7, 2005 | Copenhagen, Denmark |
| April 11-12, 2006 | Miami, Florida |
| July 25-26, 2006 | Singapore |
| December 5-7, 2006 | Montreal, Canada |
| March 26-28, 2007 | Auckland, New Zealand |
| October 2-4, 2007 | Rhodes, Greece |
| February 4-6, 2008 | London, United Kingdom |
| September 25-26, 2008 | Paris, France |

Workshops and Regional Meetings

| | |
|-----------------------------|---|
| August 3-4, 2004 | Container Shipping Workshop - Copenhagen, Denmark |
| September 14-15, 2005 | Air Cargo Industry Workshop - Los Angeles, California |
| November 24-26, 2005 | Regional OEG Meeting - Hamburg, Germany |
| September 25-26, 2006 | Maritime Industry Workshop - London, United Kingdom |
| January 31-February 1, 2007 | Proliferation Finance Workshop - Washington, DC |
| May 28-29, 2008 | Outreach Workshop - Washington, DC |

²¹⁰ Source: U.S. Department of State, "Calendar of Events," <http://www.state.gov/t/isn/c27700.htm>. Typographical errors in the State Department texts have been corrected here.

May 12-14, 2009

Global and Western Hemisphere OEG and Outreach Meeting - Miami, Florida

Planned

June 22-24, 2009

European OEG Meeting - Sopot, Poland

Appendix H PSI Exercises²¹¹

| <u>Date</u> | <u>Lead Country</u> | <u>Description</u> |
|------------------------|---------------------|---|
| September 10-13, 2003 | Australia | Exercise PACIFIC PROTECTOR: Maritime exercise in the Coral Sea. |
| October 8-10, 2003 | United Kingdom | Air CPX: Air interception command post (tabletop) exercise conducted in London, United Kingdom. |
| October 13-17, 2003 | Spain | Exercise SANSO 03: Maritime exercise conducted in the Western Mediterranean. |
| November 25-27, 2003 | France | Exercise BASILIC 03: Maritime exercise conducted in the Western Mediterranean |
| January 11-17, 2004 | United States | Exercise SEA SABER: Maritime exercise conducted in the Arabian Sea and the United States. |
| February 19, 2004 | Italy | Exercise AIR BRAKE 03: Air interception exercise conducted over Italy (Trapani). |
| March 31-April 1, 2004 | Germany | Exercise HAWKEYE: Customs exercise conducted in Germany (Frankfurt Airport). |
| April 19-21, 2004 | Poland | Exercise SAFE BORDERS: Ground LIVEX. |
| April 19-22, 2004 | Italy | Exercise CLEVER SENTINEL: Maritime exercise conducted in the Mediterranean. |

²¹¹ Source: U.S. Department of State, <http://www.state.gov/t/isn/c27700.htm>, and Government of Canada, <http://www.proliferationsecurity.info/exercises.html>.

| | | |
|------------------------------|---------------------------|---|
| June 23-24, 2004 | France | Exercise APSE 04: Simulated air interception exercise. |
| September 27-October 1, 2004 | United States | PSI Gaming Exercise: Naval War College, Newport, Rhode Island. |
| October 25-27, 2004 | Japan | Exercise TEAM SAMURAI 04: Maritime interdiction exercise. |
| November 8-18, 2004 | United States | Exercise CHOKEPOINT 04: Maritime interdiction exercise. |
| April 8-15, 2005 | Portugal | Exercise NINFA 05: Maritime/ground interdiction exercise. |
| June 1-2, 2005 | Czech Republic and Poland | Exercise BOHEMIAN GUARD 05: Regional ground interdiction exercise. |
| June 7-8, 2005 | Spain | Exercise BLUE ACTION 05: Air/ground interdiction exercise. |
| August 15-19, 2005 | Singapore | Exercise DEEP SABRE: Maritime/ground interdiction exercise. |
| October 3-7, 2005 | Norway | PSI Air Gaming Exercise: Exercise at Norwegian Naval Academy, Bergen, Norway. |
| November 14-19, 2005 | United Kingdom | Exercise EXPLORING THEMIS: Maritime/CPX interdiction exercise. |
| April 4-5, 2006 | Netherlands | Exercise TOP PORT: Maritime/CPX interdiction exercise. |
| April 4-6, 2006 | Australia | Exercise PACIFIC PROTECTOR 06: Air/CPX interdiction exercise. |
| May 24-26, 2006 | Turkey | Exercise ANATOLIAN SUN: Combined air, land and sea CPX and LIVEX interdiction exercise. |
| June 21-22, 2006 | France | Exercise HADES 06: Air |

| | | |
|-----------------------------|------------------------------------|--|
| | | interdiction exercise. |
| September 13-15, 2006 | Poland, Denmark, Russia and Sweden | Exercise AMBER SUNRISE: Maritime/ground exercise. |
| October 10-31, 2006 | United States | Exercise LEADING EDGE: CPX and maritime/ground interdiction exercise in the Persian Gulf. |
| April 26-27, 2007 | Lithuania | Exercise SMART RAVEN: Air interdiction exercise. Key participants—Estonia, Latvia, Poland. |
| May 27-29, 2007 | Slovenia | Exercise ADRIATIC GATE: Ground/port interdiction exercise. |
| June 18-22, 2007 | United States | PSI Gaming Exercise: Naval War College, Newport, Rhode Island. |
| August 29-September 2, 2007 | United States | Exercise PANAMAX 07: Inclusion of maritime PSI scenario in annual Southern Command regional exercise. |
| October 12-15, 2007 | Japan | Exercise PACIFIC SHIELD 07: Maritime/port interdiction exercise. |
| October 29-31, 2007 | Ukraine | Exercise EASTERN SHIELD 07: Combined air, ground and sea interdiction exercise. Key participants—Bulgaria, Romania, Georgia, Moldova and Poland. |
| March 10-12, 2008 | Djibouti and France | Exercise GUISTIR 08: Maritime/port interdiction exercise. Key participants—Red Sea and Maghreb countries. |
| April 8-22, 2008 | United States | Exercise PHOENIX EXPRESS 08: Maritime interoperability exercise in the Mediterranean; maritime interdiction PSI scenarios included. |
| May 12-14, 2008 | Croatia | Exercise ADRIATIC SHIELD |

| | | |
|-----------------------|---------------|---|
| | | 08: Maritime/port interdiction exercise. Key participants—Adriatic Sea countries, Poland and the United States. |
| August 11-22, 2008 | United States | Exercise PANAMAX 08: Inclusion of maritime PSI scenario in annual Southern Command regional exercise. |
| September 15-19, 2008 | New Zealand | Exercise MARU: Maritime and port CPX and LIVEX. |
| April 22-May 13, 2009 | United States | Exercise PHOENIX EXPRESS 09: Maritime interoperability exercise in the Mediterranean Sea; maritime interdiction PSI scenarios included. |

Planned

| | | |
|-----------------------|---------------|---|
| September 11-12, 2009 | United States | Exercise PANAMAX 09: Inclusion of maritime PSI scenario in annual Southern Command regional exercise. |
| October 2009 | United States | Exercise LEADING EDGE: CPX and maritime/ground interdiction exercise in the Persian Gulf. |
| October 27-30 2009 | Singapore | Exercise DEEP SABRE II: Maritime interdiction exercise. |

Appendix I

Participation in PSI, Global Initiative and FATF²¹²

| State | PSI | GI | PSI OEG | FATF |
|-------------------|-----|----|---------|------------------------|
| Afghanistan | X | X | | |
| Albania | X | X | | |
| Andorra | X | | | |
| Angola | X | | | |
| Argentina | X | | X | X |
| Armenia | X | X | | |
| Australia | X | X | X | X |
| Austria | X | X | | X |
| Azerbaijan | X | | | |
| Bahamas | X | | | |
| Bahrain | X | X | | X (GCC) ²¹³ |
| Belarus | X | | | |
| Belgium | X | X | | X |
| Belize | X | | | |
| Bosnia | X | X | | |
| Brazil | | | | X |
| Brunei Darussalam | X | | | |
| Bulgaria | X | X | | |
| Cambodia | X | X | | |
| Canada | X | X | X | X |
| Cape Verde | | X | | |
| Chile | X | X | | |
| China | | X | | X |
| Cote d'Ivoire | | X | | |
| Croatia | X | X | | |
| Cyprus | X | X | | |
| Czech Republic | X | X | | |
| Denmark | X | X | X | X |
| Djibouti | X | | | |
| El Salvador | X | | | |
| Estonia | X | X | | |
| Fiji | X | | | |

²¹² Source for GI membership: Bureau of International Security and Nonproliferation, U.S. Department of State, Washington, DC, *Global Initiative Current Partner Nations as of July 9, 2008*, <http://2001-2009.state.gov/t/isn/105955.htm>. Source for FATF membership: Financial Action Task Force, *FATF Members and Observers*, <http://www.fatf-gafi.org>.

²¹³ Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates are all represented in the FATF through the Gulf Cooperation Council (GCC).

| | | | | |
|------------------|---|---|---|--------------|
| Finland | X | X | | X |
| France | X | X | X | X |
| Georgia | X | X | | |
| Germany | X | X | X | X |
| Greece | X | X | X | X |
| Holy See | X | | | |
| Honduras | X | | | |
| Hong Kong | | | | X |
| Hungary | X | X | | |
| Iceland | X | X | | X |
| India | | X | | X (observer) |
| Iraq | X | | | |
| Ireland | X | X | | X |
| Israel | X | X | | |
| Italy | X | X | X | X |
| Japan | X | X | X | X |
| Jordan | X | X | | |
| Kazakhstan | X | X | | |
| Kyrgyzstan | X | X | | |
| Kuwait | X | | | X (GCC) |
| Latvia | X | X | | |
| Liberia | X | | | |
| Libya | X | X | | |
| Liechtenstein | X | | | |
| Lithuania | X | X | | |
| Luxembourg | X | X | | X |
| Macedonia | X | X | | |
| Malta | X | X | | |
| Marshall Islands | X | | | |
| Mauritius | | X | | |
| Mexico | | | | X |
| Moldova | X | | | |
| Mongolia | X | | | |
| Montenegro | X | | | |
| Morocco | X | X | | |
| Nepal | | X | | |
| Netherlands | X | X | X | X |
| New Zealand | X | X | X | X |
| Norway | X | X | X | X |
| Oman | X | | | X (GCC) |
| Pakistan | | X | | |
| Palau | | X | | |
| Panama | X | X | | |
| Papua New Guinea | X | | | |
| Paraguay | X | | | |
| Philippines | X | | | |
| Poland | X | X | X | |
| Portugal | X | X | X | X |
| Qatar | X | | | X (GCC) |
| Romania | X | X | | |

| | | | | |
|---------------------------|---|--------------|---|--------------|
| Russia | X | X | X | X |
| Samoa | X | | | |
| Saudi Arabia | X | X | | X (GCC) |
| San Marino | X | | | |
| Serbia | X | X | | |
| Seychelles | | X | | |
| Singapore | X | | X | X |
| Slovakia | X | X | | |
| Slovenia | X | X | | |
| South Africa | | | | X |
| South Korea | X | X | | X (observer) |
| Spain | X | X | X | X |
| Sri Lanka | X | X | | |
| Sweden | X | X | | X |
| Switzerland | X | X | | X |
| Tajikistan | X | X | | |
| Tunisia | X | | | |
| Turkey | X | X | X | X |
| Turkmenistan | X | X | | |
| Ukraine | X | X | | |
| United Arab Emirates | X | X | | X (GCC) |
| United Kingdom | X | X | X | X |
| United States | X | X | X | X |
| Uzbekistan | X | X | | |
| Vanuatu | X | | | |
| Yemen | X | | | |
| Zambia | | X | | |
| IAEA | | X (observer) | | |
| European Union (observer) | | X (observer) | | X |
| Gulf Cooperation Council | | | | X |

Appendix J

Financial Action Task Force Membership Policy²¹⁴

Step 1—Fundamental criteria of membership

a) The jurisdiction should be strategically important:

Indicators

- Size of gross domestic production (GDP).
- Size of the banking sector.
- Impact on the global financial system, including the degree of openness of the financial sector and its interaction with international markets.
- Regional prominence in AML/CFT [anti-money laundering, counter-terrorist financing] efforts.
- Level of commitment to AML/CFT efforts.

Additional considerations

- Level of adherence of financial sector standards.
- Participation in other relevant international organizations.
- Level of AML/CFT risks faced and efforts to combat those risks.

b) If the jurisdiction was to become a member, the FATF's geographic balance should be enhanced.

Step 2—Technical and other criteria

a) The country should provide a written commitment at the political level:

(i) Endorsing and supporting the FATF *Forty Recommendations* 2003, the *Nine Special Recommendations* 2001 (together referred to as the *FATF Recommendations*) and the FATF *AML/CFT Methodology* 2004 (as amended from time to time).

(ii) Agreeing to implement all the *FATF Recommendations* within a reasonable timeframe (3 years).

(iii) Agreeing to undergo a mutual evaluation during the membership process for the purposes of assessing compliance with FATF membership criteria, using the AML/CFT Methodology applicable at the time of the evaluation, as well as agreeing to undergo subsequent periodic mutual evaluations following admission as a full member.

(iv) Agreeing to participate actively in the FATF and to meet all the other commitments of FATF membership, including supporting the role and work of the FATF in all relevant fora.

b) The country should be a full and active member of a relevant FATF-style regional body.

²¹⁴ Financial Action Task Force, *FATF Membership Policy*, 29 February 2008.

c) The overall mutual evaluation needs to be regarded as satisfactory, and in particular the level of compliance for the Recommendations dealing with the money laundering and terrorist financing offences (R.1 & SR.II), freezing and confiscation (R.3 & SR.III), customer due diligence (R.5), record-keeping (R.10), suspicious transaction reporting (R.13 & SR.IV), financial sector supervision (R.23), and international co-operation (R.35, R.36, R.40, SR.I and SR.V)...need to be acceptable.

- In determining whether the overall level of compliance is satisfactory, some flexibility may be allowed with respect to Recommendation 5 due to its complexity and multifaceted requirements. The assessed country is, however, expected to demonstrate significant progress toward full compliance with the components of Recommendation 5.
- It is expected that a country should obtain ratings of fully or largely compliant for all FATF Recommendations listed above in paragraph c). If that is not achieved however, then the country must at a minimum achieve ratings of LC or C for a large majority of these Recommendations, and for the remainder, should demonstrate substantial progress toward full implementation and provide a clear commitment at Ministerial level to come into compliance within a reasonable timeframe and a detailed action plan setting out the steps to be taken and the timeframe for taking them.

Appendix K

U.S.-Russian Declaration on Nuclear Energy and Nonproliferation²¹⁵

Declaration on Nuclear Energy and Nonproliferation: Joint Actions

We are determined to play an active role in making the advantages of the peaceful use of nuclear energy available to a wide range of interested States, in particular developing countries, provided the common goal of prevention of proliferation of nuclear weapons is achieved. To this end, we intend, together with others, to initiate a new format for enhanced cooperation.

Bearing this in mind, we acknowledge with satisfaction the initialing of the bilateral Agreement between the Government of the Russian Federation and the Government of the United States of America for cooperation in the field of peaceful use of nuclear energy. We share the view that this Agreement will provide an essential basis for the expansion of Russian-U.S. cooperation in the field of peaceful use of nuclear energy and expect this document to be signed and brought into force in accordance with existing legal requirements.

We share a common vision of growth in the use of nuclear energy, including in developing countries, to increase the supply of electricity, promote economic growth and development, and reduce reliance on fossil fuels, resulting in decreased pollution and greenhouse gasses.

This expansion of nuclear energy should be conducted in a way that strengthens the nuclear nonproliferation regime. We strongly support the Treaty on the Non-Proliferation of Nuclear Weapons, and are committed to its further strengthening. We support universal adherence to the IAEA Additional Protocol and call on those who have not yet done so to sign and ratify it. We support the activities of the IAEA with respect to both safeguards and promotion of peaceful nuclear energy, and fully understand the need for growth of its capabilities, including its financial resources, commensurate with the expanded use of nuclear energy worldwide.

We are prepared to support expansion of nuclear energy in the following ways, consistent with national law and international legal frameworks. These efforts build on, reinforce, and complement a range of existing activities, including the work at the IAEA for reliable access to nuclear fuel, the initiative of the Russian Federation on developing Global Nuclear Infrastructure, including the nuclear fuel center in the Russian Federation, the initiative of the United States to establish the Global Nuclear Energy Partnership, the IAEA International Project on Innovative Nuclear Reactors and Fuel Cycles, and the Generation IV International Forum.

²¹⁵ The White House, President George W. Bush, Office of the Press Secretary, *Declaration on Nuclear Energy and Nonproliferation: Joint Actions*, July 3, 2007, at <http://georgewbush-whitehouse.archives.gov/news/releases/2007/07/print/20070703.html>.

- Facilitating the supply of a range of modern, safe, and more proliferation resistant nuclear power reactors and research reactors appropriate to meet the varying energy needs of developing and developed countries.
- Arranging for participation in national and multinational programs to develop requirements for nuclear reactors for participating countries.
- Facilitating and supporting financing to aid construction of nuclear power plants through public and private national and multinational mechanisms, including international financial institutions.
- Providing assistance to states to develop the necessary infrastructure to support nuclear energy, including development of appropriate regulatory frameworks, safety and security programs to assist states in meeting international standards, and training of personnel.
- Developing solutions to deal with the management of spent fuel and radioactive waste, including options for leasing of fuel, storage of spent fuel, and over time development of technology for recycling spent fuel.
- Ensuring that the IAEA has the resources it needs to meet its safeguards responsibilities as nuclear power expands worldwide.
- Supporting expanded IAEA Technical Cooperation to help states build the necessary infrastructure for safe, secure, and reliable operations of nuclear power plants.
- Assisting development and expansion of regional electricity grids, to permit states without nuclear reactors to share in the benefits of nuclear power.
- Providing nuclear fuel services, including taking steps to ensure that the commercial nuclear fuel market remains stable and that states are assured of reliable access to nuclear fuel and fuel services for the lifetime of reactors, including through establishment of international nuclear fuel cycle centers, to provide nuclear fuel cycle services, including uranium enrichment, under IAEA safeguards.
- Supporting negotiation of long-term contracts for power reactors and research reactors, including assured supply of fuel and arrangements for management of spent fuel.

We are prepared to enter into discussions jointly and bilaterally to develop mutually beneficial approaches with states considering nuclear energy or considering expansion of existing nuclear energy programs in conformity with their rights and obligations under the NPT. The development of economical and reliable access to nuclear energy is designed to permit states to gain the benefits of nuclear energy and to create a viable alternative to the acquisition of sensitive fuel cycle technologies.

The energy and nonproliferation challenges we face today are greater than ever before. We are convinced that this approach will permit substantial expansion of nuclear energy and at the same time strengthen nonproliferation. We welcome the cooperation of states that share this common vision and are committed to jointly taking steps to make this vision a reality.

THE PRESIDENT OF THE
UNITED STATES OF AMERICA

THE PRESIDENT OF THE
RUSSIAN FEDERATION

Washington, Moscow
July 3, 2007