

TESTIMONY

**Testimony by
Jim Walsh, Ph.D.
Research Fellow, Belfer Center for Science and International Affairs
John F. Kennedy School of Government, Harvard University**

before the
Subcommittee on International Security, Proliferation and Federal Services
of the Senate Committee on Governmental Affairs

**Multilateral Non-proliferation Regimes, Weapons of Mass Destruction
Technologies and the War on Terrorism.**

Tuesday, February 12, 2002, at 9:30 A.M
Room 342, Dirksen Senate Office Building
Washington, D.C.

Mr. Chairman and members of the subcommittee, thank you for the opportunity

to testify today about an issue of singular importance to U.S. national security: the threats posed by weapons of mass destruction and terrorism. My remarks will focus on the problem of nuclear terrorism and the ways in which multilateral regimes can reduce the threat of nuclear terrorism from states and sub-national groups.

I. Overview and Summary

This testimony begins with a brief description of the threat posed by nuclear terrorism and the current inventory of multilateral institutions relating to nuclear security. It then looks at the issue of effectiveness. Are multilateral nuclear institutions effective? A review of the first

five decades of the nuclear age suggests that the nonproliferation regime has been a surprisingly powerful tool in preventing nuclear proliferation and enhancing nuclear security.

The testimony then examines how these multilateral tools might fit into a broader strategy against nuclear terrorism. The underlying theme of this strategy is that homeland security begins abroad, that preventing nuclear terrorism requires that nuclear weapons and materials outside of the United States be protected from terrorists.

The remarks conclude with a look at the role of Congress, and steps that might be taken to strengthen nuclear regimes and reduce the threat posed by nuclear terrorism. Three areas of Congressional action are considered: oversight, appropriations, and policy innovation.

II. Threat of Nuclear Terrorism

Few people know more about the dangers of weapons of mass destruction than the members of this subcommittee. Still, it may be worth summarizing the evidence to date.

The historical record suggests that nuclear terrorism has not been a priority for terrorists, who, for a variety of reasons have concentrated on the development and use of conventional explosives. Nevertheless, recent events should remind us that though the risks may be small, the danger is real. Documents and interview data from Afghanistan suggest that al Qaeda has a genuine -- if unsophisticated -- interest in nuclear terrorism.

Al Qaeda is not the first terrorist organization to express such an interest, and it is unlikely to be the last.

Recent events have also illustrated in an uncomfortably concrete way a set of nuclear vulnerabilities that, for most analysts and policy makers, were just so many scenarios. The anthrax attacks, for example, highlight the dangers associated with "insider" terrorism. At this point, it matters less whether the anthrax terrorist once worked for the government or a

government sanctioned laboratory. What does matter is an insider -- a disgruntled worker, a technician trying to call attention to himself or some cause -- could have the knowledge and access to acquire not only biological materials but nuclear materials as well. That individual might live here in the United States or in Russia, Pakistan, India or even in a non-nuclear weapons state like Japan or Germany.

There have been other disturbing developments as well. Take, for example, the case of the Pakistani nuclear scientists working with the Taliban. It appears that these scientists did not assist any nuclear weapons program in Afghanistan, but again, their actions illustrate a danger many of us had not fully appreciated. If India and Pakistan continue down the path to

becoming fully established nuclear weapons states, all sorts of scenarios become possible. Few of them are good, and some will doubtless be unexpected. Who would have believed, for example, that Pakistan might actually consider storing its nuclear assets in Afghanistan -- as press accounts have suggested was the case during the Kargil crisis.

In short, the potential sources of trouble are numerous. There is an excess of both nuclear weapons and nuclear material, either of which, if acquired by terrorists, could be used to do great harm.

III. Nuclear Treaties and Other Multilateral Instruments

The United States and the community of nations have long recognized the dangers posed by nuclear weapons and the need for safe and secure nuclear plants and materials. Over the last half century, a number of multilateral initiatives have been used to reduce nuclear-related threats. Most of these efforts have focused on the problem of nuclear proliferation, but others have sought to increase the safety of nuclear power plants and nuclear commerce.

These multilateral institutions take a variety of forms. Some are treaties like the NPT and the Convention on the Protection of Nuclear Materials. Others are informal multilateral groups like the nuclear suppliers group. Still others -- like UNSCOM, KEDO, and the internationally sponsored science and technology center in Russia -- have developed as ad hoc responses to particular crises.

Over time, these multilateral instruments have grown in scope and sophistication. IAEA and other international institutions have developed an array of technical and other capabilities that are directly related to the prevention of nuclear terrorism. These capabilities include inspections and safeguards, coordinating intelligence from member states, the development of new technologies and protocols for detecting nuclear diversion, the physical testing and tracking of nuclear materials, peer review and training in nuclear safety and security, and even the removal and management of orphaned nuclear materials and facilities. Recently, for example, the IAEA intervened at the request of Georgia to identify and secure vulnerable nuclear materials.

IV. The Track record of Nuclear Regimes: Are They Effective?

Creating a multilateral institution is one thing; creating an effective multilateral institution is something else all together. Some multilateral institutions have been successes; others have been abject failures. How have multilateral nuclear institutions performed? One can begin by looking

at the regime's track record in the field of nuclear nonproliferation. A review of the historical record suggests that this regime has been surprisingly effective.

After 50 years, the most striking feature of the nuclear age is that there are so few nuclear states ? far fewer than predicted by virtually every expert and policy maker. As one observer noted, "almost all the published predictions of the spread of nuclear weapons have been too pessimistic." George H. Quester, "The Statistical "n" of "nth" Nuclear Weapons States," *Journal of Conflict Resolution*, Vol. 27, No. 1 (March 1983), p. 167. Similarly, Mitchell Reiss notes that nuclear weapons did not prove to be "the irresistible temptation that many feared they would be." Mitchell Reiss, *The Future That Never Came*, *Wilson Quarterly*, Vol. 19, No. 2 (Spring 1995), p. 47.

Perhaps the most famous -- or infamous -- prediction about nuclear proliferation was offered President John F. Kennedy. Kennedy warned that in ten years, an additional twenty-one countries might develop nuclear weapons. *Public Papers of the President of the United States: John F. Kennedy, 1963* (Washington, D.C.: Government Printing Office, 1964), p. 280 or *New York Times*, March 23, 1963, p. 1. The President's projection was consistent with classified estimates See, for example, Draft Memorandum for the President from the Secretary of Defense, "The Diffusion of Nuclear Weapons with and without a Test Ban Agreement," February 12, 1963, Table 1 (p. 4); Draft Memorandum for the President from the Secretary of State, "The Diffusion of Nuclear Weapons with and without a Test Ban Agreement," July 27, 1962, Table 1, John F. Kennedy Presidential Library. See also William B. Bader, *The United States and the Spread of Nuclear Weapons*, pp.11-12. and with published work from universities and think tanks. As one commentator put it, "The belief was common that nuclear spread had proceeded and would continue to proceed about as fast as technology could carry it." Sherman, *Nuclear Proliferation The Treaty and After*, p. 32. Proliferation, wrote Gallois, was "as irreversible as . . . the generalization of firearms." Pierre Gallois, *The Balance of Terror*, (Boston: Houghton Mifflin), 1961, p. 229.

An overwhelming majority of nuclear-capable countries have opted to forgo nuclear weapons, and over time, the rate of proliferation has actually declined. After peaking in the 1960s, the number of new nations joining the nuclear club each decade has gone steadily downwards, and several of the nations that built or inherited nuclear arsenals ? South Africa, Ukraine, Belarus, Kazakhstan ? chose to renounce their weapons. "When in history," asked one scholar, have so "many nations had the capability to produce a powerful weapon, and chosen not to exercise it?" Quester, "The Epistemology of Nuclear Proliferation," p. 178. Quester describes the limited spread of nuclear weapons "mysterious." NPT opponents used this history to argue that the treaty would fail. As one critic of the argued.... "The Treaty appears in some ways to be a negation of history. All people with the knowledge and resources they needed have progressed through evolutions and revolutions in industry, transport and weapons; from the manual to the machine, from sailing ships to steamers, from the oxcart to the aeroplane, and from the club to gun and bomb." X. "Australian Doubts on the Treaty." *Quadrant* 12:53 (May-June 1968), p. 31. Indeed, the absence of widespread proliferation may be the greatest policy success of the 20th century.

A key factor in this success was the establishment of the NPT. Archival documents, interviews with former country leaders, and the general pattern of state behavior suggest that the NPT had a decisive impact on the spread of nuclear weapons.

It should be emphasized that the nuclear nonproliferation regime is not a magic bullet. Several factors in addition to the NPT have contributed to nuclear restraint, and like any

policy instrument, the nonproliferation regime suffers from imperfections and trade-offs. The record suggests, however, that without the regime, many of those earlier predictions of widespread proliferation might have come true.

The record of nuclear regimes raises an obvious question. How can the multilateral nuclear regimes be used to help reduce the dangers of nuclear terrorism?

V. Nuclear Regimes and the Fight Against Terrorism

Reducing the threat of terrorism involves a dizzying array of activities. The obvious ones include police work, stanching the flow of terrorist cash, diplomacy, military action, intelligence, and improved homeland security in everything from first responder training to security at seaports.

Making sense of what to do, and how much to do in each area, requires an overall strategy. Such a strategy would likely include one or more of the following principles:

Defenses against terrorist attacks should include multiple layers.

One way to prevent terrorist attacks is to increase the number of opportunities for a terrorist operation to fail. The greater the number of defenses or obstacles that a terrorist operation must pass, the higher the likelihood the attack will be discovered and fail.

The US is only as secure as the weakest link in international security.

In general, terrorists operate best when they enjoy a territorial sanctuary from which they can plan, develop, and coordinate operations. As Bin Laden's itinerary over the years suggests, terrorists are most likely to find sanctuary in failed states and countries wracked by civil wars or other separatist conflicts. Similarly, the security of nuclear materials and technology is determined not by the level of security at its most protected facilities but by the level of security at the least protected facilities.

It is better to prevent terrorists from acquiring weapons of mass destruction than trying to stop them after they have them.

Taken together these principles suggest that in the field of WMD terrorism, homeland security begins abroad. The United States has to improve the level of domestic security, particularly in the areas of aviation and infectious disease, but that will not be enough. We cannot wait for

terrorists to acquire nuclear materials and then try to stop them when once they are bound for America on their deadly mission.

Instead the "homeland defense abroad" concept suggests five policy objectives.

1. Prevent and otherwise reduce number of nuclear weapon states.
2. Reduce the number of states with stockpiles of plutonium and highly enriched uranium.
3. Secure all remaining nuclear weapons, materials, and facilities.
4. Increase the number of area and interstate nuclear checkpoints.
5. Develop the capacity to quickly identify and trace nuclear materials.

The first two policy objectives seek to reduce the risk of nuclear terrorism by reducing the potential supply of weapons and materials. The assumption here is that the greater the number of states with nuclear weapons and materials, the greater the opportunity for terrorists to acquire these assets. The third objective focuses on defending nuclear weapons and materials from terrorists, while the fourth objective is intended to increase the chances of apprehending a terrorist who is transporting nuclear supplies, e.g., from an

acquisition point back to a home base of operations. The last objective involves situations where diversion has taken place and an agency or government is trying to figure out the source of leakage.

All of these objectives lend themselves to the use of multilateral regimes. These regimes provide a way to build the first line of the defense against nuclear terrorism. Moreover, they do so in a way that is financially and politically prudent. The United States cannot single-handedly improve the security of all the world's nuclear installations. Such a task is neither

financially nor politically feasible. Working with other nations through existing multilateral nuclear regimes provides a practical alternative for reducing the threat of nuclear terrorism.

VI. Reducing Nuclear Threats: The Role of Congress

Responding to the threats posed by nuclear weapons and nuclear terrorism is often thought of as an executive function, but history shows that the Congress can make a powerful and creative contribution. Over the course of the nuclear age, Congress has passed a number of initiatives that have had a dramatic impact on to course of proliferation. The McMahon Act, the Nuclear Nonproliferation Act, and various nonproliferation certification requirements are just a few of the many examples of Congressional leadership.

As we look to the future, there are a number of actions Congress might take to reduce the risk of nuclear terrorism -- actions that either 1) reduce or reverse the spread of nuclear weapons and materials or 2) improve the safety and security of existing nuclear assets here and abroad. These

legislative responses generally fall into one of three categories: oversight, appropriations, and policy innovation.

Oversight

Congressional oversight can be a powerful tool for change. Legislative hearings, annual reporting requirements, and appropriations tied to certification can focus the attention of the executive, the bureaucracy, and the public in a way that can produce real policy results. Given the events of the last several months, there are a number of things Congress might do in this area.

First, Congress should insist on access to all available information about nuclear terrorism. Congress cannot fulfill its legislative responsibilities without such information, and yet, much of this information is scattered or being withheld from the public domain. A variety of news organizations, including the Times of London and CNN, have their own cache of documents collected from al Qaeda safe houses and training facilities. Meanwhile, the Department of Defense and various executive agencies have their own sets of documents, as well as the results

of prisoner interviews and forensic tests. Most of this information can be made available without endangering sources and methods, and the information that is sensitive can be shared with Congress but safeguarded by traditional practices.

This is a small but critical step in the fight against nuclear terrorism. The history of WMD terrorism suggests that it is self-defeating for the executive to maintain a monopoly over information. Many of the most important nuclear initiatives of recent years had their origins outside of the executive -- in Congress, in university research centers, or with non-governmental organizations. The whole concept of cooperative threat reduction, for example, was developed outside the executive. If Congress or

organizations like the Nuclear Threat Initiative are going to pursue new approaches to WMD terrorism, and if scholars are going to provide independent assessments of the dangers and opportunities, then the Congress has to take the lead in seeing that the relevant information is available.

Congress can also request the collection of new information. It can, for example, require that the State Department or the Department of Energy issue an annual report on the status of the nuclear terrorism threat. Such a report could document the current state of nuclear security in the United

States and abroad, e.g., the number nuclear facilities, the amount of nuclear materials being stored, the current state of security against terrorism or diversion, the actions being taken to upgrade nuclear security, etc.

Congress can also use its oversight capacity to focus on a particular problem. In the past, Congress has occasionally required that a country's nonproliferation status be certified before it received American aid. One can imagine similar requirements placed on individual agencies or countries, i.e., the certification that an agency or country is making good faith efforts to reduce the threats of WMD terrorism.

Appropriations

Progress against nuclear terrorism will not be possible without financial resources. Unfortunately, efforts to prevent nuclear terrorism have not been a funding priority. This year, billions of dollars will be devoted to new weapons systems and other activities whose purpose is to respond to a terrorist attack. Only a tiny fraction of this amount will be expended on activities that would prevent WMD terrorism from happening in the first place.

Consider, for example, the recent announcement by Secretary Abraham that the US government will donate a little over a million dollars to the IAEA to assist with its work against nuclear terrorism. Compare that figure with the tens of billions of dollars in supplemental appropriations that have been approved in recent months. Much of that supplemental money will be spent on important anti-terrorist programming, but the fact remains, that there is something seriously wrong when out of billions of dollars for terrorism, only a million dollars in new money -- the equivalent of loose change in the Federal budget -- goes to the one agency that has worldwide

responsibilities for preventing nuclear terrorism.

One sees a similar dynamic at work regarding cooperative threat reduction. After originally submitting a budget that would have reduced overall funding for cooperative threat reduction programs, the President submitted a revised budget that would modestly increase the funding in this area. While the change is welcome, the scale is all wrong. Effective action against nuclear terrorism requires that the administration follow the recommendations of the blue ribbon commission led by Senator Baker. The Baker-Cutler commission recommended that funding for cooperative threat reduction and nuclear security be tripled over the next several years, and that was before September 11th and the subsequent revelations concerning al Qaeda's interest in nuclear terrorism.

In the past, Congress has used its power over the purse to insure that funds were devoted to the problem of nuclear terrorism, even in the face of executive and bureaucratic indifference. Today, the need for Congressional leadership has never been greater. It will again be up to Congress to insist that there are funds for cooperative threat reduction, for the IAEA, and for other efforts aimed at reducing the threat of nuclear terrorism. With rising deficits and a long list of interests lining up for a share of terrorism-related funds, this will not be easy, but success in the fight against nuclear terrorism depends on continued leadership from Congress. Congress must find a way to not only fund efforts to

prevent nuclear terrorism, but fund them at a scale commensurate with the size of the problem.

Policy Innovation

One of the most exciting areas where Congress can contribute to nuclear security is in the field of policy innovation. The outstanding example of this kind of policy entrepreneurship is the aforementioned cooperative threat reduction -- a concept that did not exist a decade ago and would not have taken hold without the efforts of Senators Lugar, Nunn, and Domenici.

Today, the challenge is to extend the concept and to pursue new initiatives that will prevent nuclear terrorism. The list of legislative innovations that Congress might consider include the following:

Internationalizing the concept of threat reduction beyond the former Soviet Union.

This could include 1) developing instrumentalities with the other NPT-designated nuclear weapons states and 2) establishing non-military cooperation with undeclared nuclear weapons states and non-nuclear countries that possess direct use materials.

Enact improved reporting and regulation of nuclear occupations.

In the United States, airline pilots, aviation personnel, train conductors, and other critical occupations operate under heightened scrutiny. There are special requirements relating to training, substance abuse, internal security, and the like. Workers in these occupations face these additional requirements, because their jobs are directly related to public safety. A similar argument might be made for nuclear engineers and others whose training or access may be critical to the success or failure of nuclear terrorism.

Developing worldwide civil constituencies for nuclear security.

During the Cold War, the US pursued a variety of initiatives to promote democracy around the world. It set up a special institute to support democratic institutions abroad, established Radio Free Europe, and funded a variety of programs whose purpose was to develop a constituency for

democratic governance. Congress later used this tactic in support of a different objective when it established the US Institute for Peace. For its own part, the executive has established a series of special funds, e.g., the special fund for AIDS in Africa. These same tactics can be applied to the new problem of nuclear security. The Congress could, for example, establish a foundation or institute for the prevention of WMD terrorism. Acting as a private entity, this institute could train and support the development of professional nuclear societies, journalists, locally based environmental groups, and others who could monitor the state of nuclear security and press for improvements in their own countries.

Establishment legislator-to legislator dialogues.

In the past, Congress has established a series of consultations with legislators from other countries on issues of particular concern. One such dialogue brought together members of the US Senate and members of the Russian Duma to discuss arms control. A similar tactic might be used for the prevention of WMD terrorism. Legislator-to legislator dialogues would provide the US Congress with first hand information about the problem of nuclear security in other countries. More importantly, it would provide a means for building political and financial support for cooperative WMD initiatives.

This list of new initiatives is by no means exhaustive. Instead, it is meant to illustrate

how Congress might approach the question of policy innovation. Simply put, it makes sense for Congress to think about the policy instruments it has used in other issue domains, and how they might be creatively applied to the new context of nuclear terrorism.

VII. Conclusion

Mr. Chairman, and members of the subcommittee, it has been a great honor to speak with you today. In my testimony, I have tried to describe the danger of nuclear terrorism and the current set of multilateral policy instruments that might be brought to bear on the problem. I have suggested that these multilateral regimes have proven to be very effective and that they can be

even more effective if considered as part of a broader strategy against nuclear and WMD terrorism. This strategy, premised on the notion that "homeland security begins abroad," seeks to prevent nuclear terrorism at the source, to stop terrorists before they reach our shores. To accomplish that mission will require the active involvement of Congress. The Senate has been a leader on these issues, but it can do even more. Indeed, it must do more.

September 11th was a wake up call. It is history grabbing us by the collar and telling us to act now before it is too late. No institution has shown more vision, steadfastness, or creativity on the problem of WMD terrorism than the United States Senate, but recent events clearly demonstrate that additional action is required. My hope and expectation is that the Senate will respond to this challenge as it has responded to the challenges of the past, and that America will be a stronger and more secure nation as a result.

Thank you.

[Committee Members](#) | [Subcommittees](#) | [Hearings](#) | [Key Legislation](#) | [Jurisdiction](#)
[Press Statements](#) | [Current Issues](#) | [Video of Select Hearings](#) | [Sites of Interest](#)