Order Code RL32359

Globalizing Cooperative Threat Reduction: A Survey of Options

January 27, 2005

Sharon Squassoni
Specialist in National Defense
Foreign Affairs, Defense, and Trade Division

Globalizing Cooperative Threat Reduction: A Survey of Options

Summary

Increasingly, Congress and the Bush Administration are looking to utilize nonproliferation assistance programs, including cooperative threat reduction, to help reduce the risk of terrorist access to weapons of mass destruction (WMD). In the FY2004 National Defense Authorization Act (P.L. 108-176, Sec. 1308), Congress authorized the Bush Administration to spend $50 million of unobligated funds from the Cooperative Threat Reduction Program in states outside the former Soviet Union. As of January 2005, the Administration had spent such funds only in Albania for the purpose of eliminating chemical weapons stockpiles. The report of the 9/11 Commission called for continued support for threat reduction assistance to keep WMD away from terrorist groups. This report, which will be updated as needed, analyzes the range of possible applications of CTR funds, the kinds of assistance that might be supplied, and describes legal, financial, technical, and political constraints on possible assistance.

A key underlying issue is that the countries that pose the greatest risks may be least amenable to cooperative approaches. A second issue is that there is an array of U.S. domestic and international legal restrictions on the most useful kinds of cooperation. Both the executive branch and Congress may need to consider domestic and international legal and political restrictions on cooperation with states outside the nonproliferation regimes, low levels of transparency exhibited by most of the potential recipient states, and the lack of incentives for many of these states to pursue threat reduction measures. In addition, Congress may wish to consider whether potentially expanding the geographic scope of CTR may have a negative effect on existing programs. One school of thought believes Russia, as the largest source of stocks of biological, chemical, and nuclear weapons, should continue to be the main focus of attention. Other observers believe there is now an opportunity to focus on states within the nexus of terrorism and WMD.

This report complements CRS Report RL31957, *Nonproliferation and Threat Reduction Assistance: U.S. Programs in the Former Soviet Union*, CRS Report RL31589, *Nuclear Threat Reduction Measures for India and Pakistan*, and CRS Report RS21840, *Expanding Threat Reduction and Nonproliferation Programs: Concepts and Definitions*.

Contents

List of Tables

Globalizing Cooperative Threat Reduction: A Survey of Options

Introduction

Nonproliferation assistance programs are a relatively new tool in combating the proliferation of weapons of mass destruction. The Cooperative Threat Reduction (CTR) programs, funded by the Department of Defense (DOD), are the most visible of these programs. Begun in 1991, CTR initially aimed to help Russia meet its START obligations to reduce strategic nuclear weapons.[1] Within a decade, however, CTR took on the goal of reducing the threat of terrorist access to weapons of mass destruction (WMD).[2] Experts realized that Russia needed to protect its Cold War overhang of WMD materials, scientists, and equipment from those who might exploit insider opportunities and who had incentives (particularly financial) to sell WMD technology to anyone. Now, however, many analysts support expanding cooperative threat reduction programs beyond Russia to other geographic areas. The Bush Administration itself stated in early 2003, that it had "expanded the strategic focus of the CTR program" to support the war on terrorism.[3]

In the FY2004 National Defense Authorization Act (P.L. 108-16, Sec. 1308), Congress authorized the Bush Administration to spend $50 million of unobligated funds from the Cooperative Threat Reduction Program in states outside the former Soviet Union As of January 2005, the Administration had spent such funds only in Albania for the purpose of eliminating chemical weapons stockpiles.[4] The report of the 9/11 Commission called for continued support for threat reduction assistance to keep WMD away from terrorist groups.

This report surveys options for applying CTR programs to states that pose a WMD and terrorism threat. It describes potential recipients of such funding (those states with WMD programs and terrorism problems); the kinds of assistance that may be possible; potential legal, political, and technical constraints on assistance; and potential costs and benefits to the United States of providing such assistance. The report begins with a brief review of why CTR programs might be considered applicable to the threat of WMD terrorism and then takes a more detailed look at the

---

[1] See CRS Report RL31957, *Nonproliferation and Threat Reduction Assistance: U.S. Programs in the Former Soviet Union*, by Amy Woolf, for a comprehensive review.

[2] "WMD" in this paper includes nuclear, biological, and chemical weapons, and excludes the missiles that can delivery such weapons, and radiological weapons.

[3] U.S. Department of Defense, *Fiscal Year 2004/2005 Biennial Budget Estimates*, February 2003. p. 1.

[4] "Albania's Chemical Cache Raises Fears About Others," *Washington Post*, Jan. 10, 2005

threat of WMD terrorism. It reviews how certain kinds of CTR assistance might help defuse the threat and presents some options tailored for specific countries. The report also looks at constraints involved in providing assistance and broader implications of such assistance.

Connecting CTR and WMD Terrorism

The belief that terrorists were growing more interested in WMD grew after the 2001 terrorist attacks on the United States, despite no obvious link, and continued to grow as U.S. policy statements made further linkages. In his January 2002 State of the Union Address, President Bush highlighted Iraq, Iran and North Korea as "axis of evil" states — those that support terrorism and also have WMD. Later that year, both the National Security Strategy and the National Strategy to Combat Weapons of Mass Destruction Proliferation highlighted the connection between terrorists and WMD. In 2003, the U.S. went to war with Iraq, justifying this action primarily on the grounds that Iraq had WMD and a connection to terrorists associated with 9/11. More recently, the exposure of the A.Q. Khan nuclear network in Pakistan, which provided sensitive nuclear weapons technology (including a bomb design) to Libya, Iran, and North Korea, has raised concerns not just about what could be traded clandestinely, but also about potential terrorist access to WMD. Khan's sale of technology to three state sponsors of terrorism, allegations of ties to a terrorist organization, and the Pakistan government's precarious relationship with terrorist groups on its soil have prompted some to call for assistance to Pakistan to reduce the threat of terrorist access to WMD.

A key strategy in limiting the risk of terrorist access to WMD is to cut off access at the source. For some, Russia should continue to be the main focus of efforts to prevent and deter terrorists from acquiring WMD because of Russia's vast Cold War overhang of WMD technologies, material, and personnel. Others see September 2001 as a watershed after which cooperation should be extended to problem states, such as Pakistan, Syria, Libya, and Iran. Still others see nonproliferation assistance programs as a way to bring states outside the nonproliferation regime, like North Korea and Pakistan, under some restraints.

The Bush Administration has advocated the use of traditional and new tools to counter WMD proliferation, including interdiction, preemption, diplomacy, and assistance. In a key nonproliferation speech on February 11, 2004, President Bush introduced seven new initiatives, including expanding CTR. In particular, Bush noted that such funds could be used for retraining weapons scientists in Iraq and Libya or for reducing uranium enrichment levels in foreign research nuclear reactors.[5]

---

[5] At the National Defense University, President Bush unveiled six other initiatives to combat WMD: (1) expand the Proliferation Security Initiative to include "shutting down facilities, seizing materials, and freezing assets"; (2) pass U.N. Security Council resolution requiring all states "to criminalize proliferation, enact strict export controls and secure all sensitive materials within their borders"; (3) encourage states to renounce uranium enrichment and plutonium reprocessing by ensuring reliable access, at reasonable cost, to fuel for civilian nuclear reactors and make NSG enrichment- and reprocessing-related nuclear exports available only to states that already have a fully operational capability; (4) make signature

(continued...)

(In fact, however, programs to retrain such scientists have used State Department Nonproliferation and Disarmament Fund monies.)

A few underlying issues may influence the ultimate success of CTR-like approaches. One is the "cooperative" element in the U.S. relationship with the state in question. A state's willingness to cooperate may hinge on calculations of the WMD program's importance to its security and other geopolitical considerations. A second issue may be that state's perception of CTR assistance — is this just another name for arms control, U.S. unilateralism, or bribery? More broadly, there is the question of whether globalizing CTR may spread resources thinly at a time when there is still significant work to be done in Russia and the former Soviet states.

Congressional Role

Since 1991, Congress has authorized CTR funds specifically for use in the Soviet Union, and later, in Russia and former Soviet Union (FSU) states. Before FY2004, agencies used other sources of funding for nonproliferation assistance programs applied outside of Russia and the FSU. In FY2004, the Bush Administration was able to use $50 million of unobligated CTR funds outside the FSU. The "Nunn-Lugar Expansion Act" was passed as part of the FY2004 National Defense Authorization Act (P.L. 108-136) to "assist the United States in resolution of critical emerging proliferation threats and to permit the United States to take advantage of opportunities to achieve long-standing nonproliferation goals." The final language of the act requires the President to determine, and notify Congress in writing within 10 days after obligating funds, that the: (a) project/activity will help the United States in the resolution of a critical emerging proliferation threat; or permit the United States to take advantage of opportunities to achieve long-standing nonproliferation goals; (b) Department of Defense is the government agency most capable of carrying out the project/activity; and (c) project/activity will be completed in a short period of time. Conferees noted that they expected the President to assign projects to the most appropriate agencies.[6]

On November 16, 2004, Senator Lugar introduced S. 2980, which sought to remove some restrictions associated with using CTR funds outside of the FSU. In brief, the legislation sought to remove CTR program-wide restrictions on spending the money (including certifications), remove the $50-million cap, remove restrictions on spending money for chemical weapons destruction, and provide "notwithstanding" authority. Although the legislation remained in the Senate Foreign Relations Committee, it is likely to be introduced again in the 109th Congress.

---

[5] (...continued)
of the Additional Protocol a prerequisite for any nuclear imports; (5) create a special committee of the IAEA Board of Governors for safeguards and verification; and (6) disqualify any state currently under investigation from serving on the IAEA Board. See [http://www.whitehouse.gov/news/releases/2004/02/20040211-4.html]

[6] In a separate action, Rep. Schiff introduced H.R. 2063, for the same purpose. Schiff's bill specifically named Pakistan, India, North Korea, China, Iran, and Iraq as potential recipients of CTR assistance.

Background

The threat of terrorist access to WMD is a relatively new concern for nonproliferation experts. First, the nonproliferation regime has always focused on controlling ingredients at the source as the most effective first line of defense. This already addresses two kinds of terrorist threats: that an insider might collaborate to sell or give a terrorist some materials and that terrorists might seek to steal materials themselves from facilities. Second, the regime has controls for transfers to anyone (not just states) outside the regime. Third, apart from Aum Shinrikyo's use of sarin gas on the Tokyo subway, few non-state actors have conducted or attempted to conduct an attack with a functional nuclear, chemical or biological weapon.[7]

On the other hand, the perception of an increased threat of terrorist use of WMD has grown since the September 2001 attacks on the United States. There is evidence that Al Qaeda assigned a high priority to acquiring a WMD capability and some observers believe that chemical and biological weapons (CBW) capabilities are increasingly available. The Central Intelligence Agency (CIA) has estimated that "the threat of terrorists using chemical, biological, radiological and nuclear (CBRN) materials remained high" in 2003 [note the use of the word "materials," not weapons]. Yet, the CIA also concluded that "terrorist groups probably will continue to favor long-proven conventional tactics such as bombings and shootings."[8] In addition, the number of terrorist and CBW incidents have declined.[9] In *Patterns of Global Terrorism 2003*, the State Department reported that there was a decline in terrorist acts in 2003 from 2002, and that the number of incidents was the lowest since 1969.[10] Nevertheless, analysts both inside and outside the U.S. government have focused growing attention on the potential "nexus of WMD and terrorism" threat.

The Threat: Nexus of WMD and Terrorism

According to the 2002 National Security Strategy, "rogue states" are those that:

> brutalize their own people and squander their national resources for the personal gain of the rulers; display no regard for international law, threaten

---

[7] Richard A. Falkenrath, Robert D. Newman, and Bradley A. Thayer, *America's Achilles' Heel* (Cambridge MA: MIT Press, 1998), p. 30.

[8] Central Intelligence Agency, *Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions*, 1 June Through 31 December 2003. Report pursuant to Section 721 of the FY1997 Intelligence Authorization Act. See [http://www.cia.gov/cia/reports/721_reports/pdfs/721report_july_dec2003.pdf]. See also CRS Report RL31332, *Weapons of Mass Destruction: The Terrorist Threat*.

[9] CRS Report RL31831, *Terrorist Motivations for Chemical and Biological Weapons Use: Placing the Threat in Context.*

[10] U.S. State Department, *Patterns in Global Terrorism 2003*, Washington DC. Available at [http://www.state.gov/documents/organization/31912.pdf].

> their neighbors, and callously violate international treaties to which they are party; are determined to acquire weapons of mass destruction, along with other advanced military technology, to be used as threats or offensively to achieve the aggressive designs of these regimes; sponsor terrorism around the globe; and reject basic human values and hate the United States and everything for which it stands.[11]

The CIA has reported a growing concern that traditional state recipients of WMD technology "may follow North Korea's practice of supplying specific WMD-related technology and expertise to other countries or non-state actors."[12] When those states are designated state sponsors of terrorism, there is the possibility they may provide the terrorist organizations that they support with WMD materials or weapons. While there is very little evidence to support this assumption, it cannot be ruled out. Because these countries tend to be "pariah" states, however, they may offer few footholds for cooperation. Nonetheless, some of the new and reinvigorated cooperation in counterterrorism since 2001 may help spur cooperation in other areas. Equally risky is the category of states that have terrorist activity on their soil and WMD programs. These pose a different kind of risk: that terrorists may gain access to WMD without the authority or knowledge of the host government, either through insider ties or through instability engendered by terrorist activity.

Table 1, below, cross-references WMD capabilities and terrorist activities. Estimates of WMD capabilities are drawn from semiannual CIA unclassified reports to Congress (per Section 721 of the FY1997 Foreign Intelligence Authorization Act), *"Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions.* For the purposes of analysis, terrorism activity is divided into "state sponsors" of terrorism (per Section 6j of the Export Administration Act of 1979); and those with activity (terrorist incidents) on their soil. It could be argued that the list of state sponsors of terrorism corresponds poorly with the threat because most of the formal state sponsors of terrorism provide support, or used to provide support, for older groups and not necessarily those that appear to be most threatening now. However, such a list provides a starting point for analysis.

---

[11] White House, *The National Security Strategy of the United States*, available at [http://www.whitehouse.gov/nsc/nss.html].

[12] CIA, *WMD Technology Acquisition*, January-June 2002.

Table 1. WMD Capabilities and Terrorism

	Nuclear Weapons	Biological Weapons	Chemical Weapons	Terrorism Threat	Treaty Adherence		
					NPT	CWC	BWC
Algeria	——	Research?	Suspected	Activity	Y	Y	Y
Cuba	——	Reported	—	State sponsor	Y	Y	Y
Egypt	R&D	R&D	Likely	Activity	Y	N	Y*
India	Known	——	Has Had	Activity	N	Y	Y
Indonesia	——	——	Sought	Activity	Y	Y	Y
Iran	Seeking	Likely	Has Had	State sponsor	Y	Y	Y
Iraq	Ended	Ended	Ended	State sponsor	Y	N	Y
Israel	Known	Likely R&D	Likely	Activity	N	Y*	N
Kazakhstan	——	——	Suspected	——	Y	Y	N
Libya**	Ended	Declared none	Ended	State sponsor	Y	Y	Y
Myanmar	——	——	Likely	——	Y	Y*	Y*
North Korea	Assumed	Likely	Known	State sponsor	N	N	Y (NPT withdrawal)
Pakistan	Known	——	Likely	Activity	N	Y	Y
Saudi Arabia	——	——	Suspected	Activity	Y	Y	Y
South Africa	Ended	Ended	Suspected	——	Y	Y	Y
South Korea	Ended	——	Suspected	——	Y	Y	Y
Sudan	——	——	Suspected	State sponsor	Y	Y	Y
Syria	——	Seeking	Known	State sponsor	Y	N	Y*
Taiwan	Ended	Suspected	Likely	—	N	N	Y
Thailand	——	——	Suspected	Activity	Y	Y	Y
Vietnam	——	——	Likely	——	Y	Y	Y
Yugoslavia/ Kosovo	——	——	Suspected	Activity	Y	Y	Y

Sources: CRS. Estimates of WMD capabilities are drawn from semiannual CIA Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions (per sec. 721 of FY1997 Foreign Intelligence Authorization Act.)

Notes:

Y = party to treaty
Y* = signed but not ratified treaty
N = not party to treaty

NPT = Nuclear Nonproliferation Treaty
CWC = Chemical Weapons Convention
BWC=Biological and Toxin Weapons Convention

**Libya renounced its WMD programs on December 19, 2003.

State Sponsors of Terrorism

Per Section 6(j) of the Export Administration Act of 1979 (50 U.S.C. App. 2405 (j)), the U.S. Secretary of State currently designates six countries as state sponsors of terrorism: Cuba, Iran, Libya, North Korea, Sudan, and Syria. Iraq was taken off the list on October 20, 2004.[13]

Cuba. Cuba was first designated a state sponsor of terrorism in 1982. Although it has ratified all 12 counterterrorism conventions, it has remained opposed to the U.S. global war on terrorism.[14] The CIA judged in August 2003 that "We have no credible evidence, however, that the Cuban government has engaged in or directly supported international terrorist operations in the past decade, although our information is insufficient to say beyond a doubt that no collaboration has occurred."[15]

The Administration's assertions concerning Cuba's WMD programs, which some observers dispute, focus on limited biological weapons research and development. Construction at the Juragua nuclear facility (two incomplete Russian nuclear power reactors) was indefinitely postponed in 1997.

Iran. According to the State Department, Iran "remained the most active state sponsor of terrorism in 2003."[16] Although it is a member of the Nuclear Nonproliferation Treaty (NPT), the Chemical Weapons Convention (CWC) and the Biological Weapons Convention (BWC), many observers believe that it has active nuclear, chemical, and biological weapons programs. Many have believed for years that Iran's desire to acquire advanced nuclear fuel cycle capabilities really masks a nuclear weapons program. As a result of intensified inspections by the International Atomic Energy Agency (IAEA), Iran reported in late 2003 that it enriched small quantities of uranium using centrifuge and laser techniques and separated a small quantity of plutonium. On December 18, 2003, Iran signed an Additional Protocol to its nuclear safeguards agreement that will enhance reporting and inspection activities, but the agreement has not yet been ratified. Although the IAEA Board of Governors has not found Iran to be in violation of its NPT safeguards agreement, the Agency continues to investigate Iran's activities.[17]

The United States believes that Iran "continues to seek chemicals, production technology, training, and expertise from abroad...[and that it] has stockpiled blister, blood, and choking agents," and aired these concerns at the First Review Conference

---

[13] See CRS Issue Brief IB10119, *Terrorism and National Security: Issues and Trends*.

[14] See CRS Report RL32251, *Cuba and the State Sponsors of Terrorism List.*

[15] CIA's unclassified responses to Questions for the Record from the Worldwide Threat Hearing of February 11, 2003, dated August 18, 2003, p. 145 [hereafter CIA unclassified responses to Worldwide Threat Hearing 2003].

[16] U.S. State Department, *Patterns in Global Terrorism 2003*.

[17] See CRS Report RS21592, *Iran's Nuclear Program: Recent Developments.*

of the CWC in April 2003.[18] Iran, which ratified the CWC in 1997, first admitted it had a past CW program in 1998, but it has not acknowledged its use of chemical weapons against Iraq. Iran also reportedly provided Libya with chemical weapons that were later used in Chad.[19] The CIA has reported to Congress that Iran has continued to seek chemicals, production technology, training, and expertise from Chinese entities. The CIA also believes that Iran has stockpiled blister, blood, and choking agents and probably has nerve agents. In addition, the CIA reported in 2003 that Iran continued to seek dual-use biotechnical material, equipment and expertise, from which its offensive BW program could have benefitted.[20] The State Department's Bureau of Intelligence and Research reported in April 2003 that "Iran probably has capabilities to produce small quantities of BW agents, but has a limited ability to weaponize them."[21]

Libya. Libya was designated a state sponsor of terrorism at the list's inception in 1979. The U.S. State Department noted in 2003 that "Libya held to its practice in recent years of curtailing support for international terrorism, although Tripoli continues to maintain contact with some past terrorist clients." In 2002, the State Department maintained there had "been no credible reports of Libyan involvement in terrorism since 1994."[22] At issue also is Libya's harboring of terrorists. Since 2002, Libya has been a party to all 12 international conventions and protocols relating to terrorism and according to one observer, "there has been a considerable amount of cooperation between Libya and the United States in terms of intelligence exchanges" since September 11, 2001.[23]

In 2003, the Bush Administration noted "we have long been concerned about Libya's longstanding efforts to pursue nuclear, chemical and biological weapons and ballistic missiles."[24] In contrast to credible reports of Libya's chemical weapons capability (CW use against Chad in the 1980s and facilities at Rabta and Tarhuna), and ballistic missile development, most observers were not overly concerned about its nuclear efforts (although longstanding, not very successful) or potential biological weapons research. Not surprisingly, voluntary inspections by U.S. and British officials of Libya's programs in 2004 revealed a CW stockpile of 10-year-old

---

[18] U.S. National Statement, First Review Conference of the CWC; Assistant Secretary of State for Arms Control Stephen G. Rademaker; April 28, 2003.

[19] U.S. Department of Defense, *Proliferation: Threat and Response*, 1997.

[20] CIA, *WMD Technology Acquisition*, January-June 2003.

[21] INR's (Assistant Secretary Carl Ford) unclassified responses to questions submitted for the record from the February 11, 2003 Worldwide Threat Hearing, p. 191, April 30, 2003.

[22] U.S. Department of State, *Background Notes for Libya* at [http://www.state.gov/r/pa/ei/bgn/5425.htm]. See also *Patterns of Global Terrorism 2003,* p. 91 and *Patterns of Global Terrorism 2002*, p. 80.

[23] David Mack, vice president of the Middle East Institute, in an interview with the PBS Newshour, August 18, 2003.

[24] Testimony of Under Secretary of State for Arms Control and International Security John R. Bolton, in U.S. Congress, House Committee on International Relations, 108th Cong., 1st sess., June 4, 2003.

mustard gas and a handful of centrifuge equipment (for uranium enrichment), according to press reports.[25] Libya is a member of the BWC and the NPT, but until recently, had refused to sign the CWC.

Libya's cooperation shifted in 2003. Early in 2003, Libya proposed a sequential process by which the families of victims of the Pan Am 103 bombing in 1988 would be compensated, in return for a lifting of U.N. sanctions, U.S. sanctions, and removal from the U.S. state sponsors of terrorism list. U.N. sanctions were lifted in September 2003, leaving U.S. sanctions and removal from the terrorism list.[26] Some have seen Libya's December 2003 pledge to eliminate its WMD programs as another significant step toward normalizing relations with the United States, but President Bush's December 19, 2003 statement pointedly noted that Libya must also fully engage in the war against terror.

Specifically, Libya pledged in December 2003 to: eliminate all elements of chemical and nuclear weapons programs; eliminate all chemical weapons stocks/munitions and accede to the Chemical Weapons Convention; declare all nuclear activities to the IAEA, accept "international inspections" to ensure compliance with the NPT and sign the Additional Protocol; eliminate ballistic missiles with ranges exceeding Missile Technology Control Regime standards (300km; 500kg payload); and allow immediate inspections and monitoring to verify these actions.[27] U.S. and British officials, as well as IAEA staff, conducted inspections toward the end of 2003. On February 5, 2004, Libya signed the CWC and destruction of its CW program began on February 27, 2004. On March 10, 2004, Libya signed the Additional Protocol to its nuclear safeguards agreement, but removal and destruction of nuclear-related items began in January 2004.

North Korea. North Korea was added to the terrorism list on January 20, 1988 and remains on the list although it is not known to have sponsored any terrorist acts since 1987. According to the State Department, North Korea did not take substantial steps to cooperate in the war on terrorism in 2002. North Korea has become party to 6 of the 12 international conventions. However, it has sold conventional weapons to several terrorist groups and reportedly continues to provide safe haven to some terrorists, which is one of the conditions that puts a country on the list.[28]

North Korea's WMD programs are a high priority threat for the Bush Administration. Its nuclear program and ballistic missile capabilities are well-documented; it has a known chemical weapons capability and is considered likely to have a BW capability.[29] North Korea withdrew from the NPT in April 2003 and has been found to have repeatedly violated U.S. missile nonproliferation laws.

---

[25] "Libya Made Progress in Nuclear Goal," *Washington Post*, December 21, 2003.

[26] See CRS Report RS21601, *Libya: PanAm 103 Settlement*.

[27] Fact Sheet, "The Presidents' National Security Strategy to Combat WMD: Libya's Announcement," The White House, December 19, 2003.

[28] *Patterns of Global Terrorism 2002*, p. 81.

[29] CRS Issue Brief IB91141, *North Korea's Nuclear Weapons Program* and CRS Report RS21391, *North Korean Nuclear Weapons: How Soon an Arsenal?*

Statements from North Korea on its capabilities are a bit misleading: in 2003, North Korea repeatedly stated that it has reprocessed all its spent fuel, that it has nuclear weapons, and on one occasion, North Korean officials threatened to export nuclear weapons.[30] In January 2004, North Korean officials reportedly told an unofficial U.S. delegation that they did not have nuclear weapons or a uranium enrichment program.[31] There is no public evidence that North Korea has offered nuclear material for sale, whether produced in the early 1990s or more recently.

Sudan. Sudan has ratified all twelve international counterterrorism conventions and publicly foresworn support for terrorism. In 2001 the United Nations lifted its sanctions in recognition of Sudan's positive steps against terrorism. In addition, Ambassador Black, the State Department's counterterrorism coordinator, underscored Sudan's cooperation in 2003, which included improved access to individuals of interest, financial institutions, and records. Nonetheless, the CIA estimated in 2003 that al Qaeda, Egyptian Islamic Jihad, Egyptian al-Gama'a al-Islamiyya, PIJ, and Hamas continued to operate in Sudan.[32] The FBI reportedly believes that Sudan is a "permissive environment and a transit point for Islamic extremists who engage in recruiting, training, fund-raising, and logistical support for terrorist activity worldwide."[33] According to the *Patterns of Global Terrorism* 2003 report, Sudan has "deepened its cooperation with the U.S. government" to apprehend terrorists, but some concerns remain.

Sudan is suspected of having a chemical weapons program, despite being a party to the CWC. The most recent CIA assessment states that "although Sudan has aspired to a CW program, the US is working with Sudan to reconcile concerns about its past attempts to seek capabilities from abroad."[34] Sudan is not thought to have nuclear or biological weapons programs.

Syria. According to the *Patterns in Global Terrorism 2003* report, despite some cooperation on al Qaeda and the Taliban, Syria continues to provide political and material support to "Palestinian rejectionist groups," including Hezballah, Hamas, and Palestinian Islamic Jihad. While in Damascus in May 2003, Secretary of State Colin Powell warned Syria to withdraw support from terrorist organizations, and Syria announced that Hamas, PIJ the Popular Front for the Liberation of Palestine – General Command, and the Popular Front for the Liberation of Palestine had "voluntarily" closed their offices there. On December 12, 2003, President Bush signed into law P.L. 108-175, the Syria Accountability and Lebanese Sovereignty Restoration Act, which would impose sanctions on Syria until it ceases support for terrorist groups, ends its occupation of Lebanon, ends WMD development, and ceases facilitating terrorist activity in Iraq. On May 11, 2004, President Bush issued Executive Order 13338, which implemented sanctions, including a ban on munitions

---

[30] CIA, *WMD Technology Acquisition*, January-June 2003.

[31] "North Korea Denies It Has a Warhead," *Los Angeles Times*, January 13, 2004.

[32] CIA unclassified responses to Worldwide Threat Hearing 2003. p. 138.

[33] FBI's unclassified responses to Questions for the Record from the Worldwide Threat Hearing of February 11, 2003, p. 237.

[34] CIA, *WMD Technology Acquisition*, January-June 2003.

and dual-use items, as well as a ban on exports other than food and medicine and Syrian aircraft flights to or overflights of the United States.[35]

With respect to WMD, Syria has a known CW program and is believed to be seeking biological weapons. According to one press account, "It is the worst kept secret in the Middle East that Damascus has one of the largest stockpiles of chemical agents in the region."[36] Syria is not a party to the CWC, and has signed but not ratified the BWC. Syria also has an arsenal of short- and medium-range ballistic missiles. It is a party to the NPT and, despite having signed nuclear cooperation agreements with Russia in 1998 and 2000, few believe it has serious nuclear weapons aspirations.

States with Terrorist Activity and WMD Programs

In addition to the state sponsors of terrorism that have WMD programs, there are other states with WMD programs that have terrorist activity on their soil. Pakistan, India, and Israel fit in this category. The fact that none is a member of the NPT could limit cooperation in the nuclear area. All are members of the CWC, but many observers believe Israel and Pakistan have covert CW programs. India declared its CW program in 1997, after initial declarations that it had no CW. India has already destroyed 46% of its Category 1 CW stockpile and all of its Category 2 weapons; it must destroy the rest by 2007. Pakistan and India are members of the BWC and are not thought to have BW programs; Israel has not joined the BWC and many believe that it has carried out BW research and development.

In addition to those three, Algeria, Saudi Arabia and Egypt are likely concerns for CW programs and potential terrorist access; of those three, only Egypt is not a party to the CWC. Egypt is also a concern because it is known to have a BW program; it has signed but not ratified the BWC. The Defense Intelligence Agency reported in April 2003 that "we do not believe that Saudi Arabia is trying to acquire biological or chemical agents or weapons from foreign sources."[37] In January 2005, the IAEA began to investigate reports that Egypt had conducted some nuclear reprocessing at a laboratory-scale level.[38]

How Significant Is the Nexus?

Two factors should be considered in assessing the severity of a threat of terrorist access to WMD: intention and opportunities. First, terrorists operating in certain countries that have WMD programs do not necessarily have an interest in acquiring WMD. Most of the terrorist groups with an interest in WMD tend to be more

---

[35] CRS Issue Brief IB92075, *Syria: U.S. Relations and Bilateral Issues*.

[36] "We Won't Scrap WMD Stockpile Unless Israel Does, Says Assad," *London Daily Telegraph*, January 6, 2004.

[37] Defense Intelligence Agency's (DIA) unclassified responses to questions for the Record from the Worldwide Threat Hearing of February 11, 2003, dated June 30 2003, p. 223.

[38] "Egypt and Nuclear Weapons," *Washington Times*, January 24, 2005

internationally rather than domestically focused.[39] To date, the Kurdistan Worker's Party (PKK), Hamas, Al Qaeda, and Aum Shinrikyo have demonstrated interest in developing weapons of mass destruction. Although the following countries have terrorist activities on their soil, terrorists active on their soil have not demonstrated WMD intentions: Algeria, India, Thailand, and Yugoslavia/Kosovo.

Second, the states in question present different opportunities for terrorists to gain access. In some cases, facilities may be remotely located, with good surveillance capabilities and good security. In addition, some facilities may be under military control. The level of security in a country like North Korea or Israel may be much higher than, for example, in Algeria or Egypt. Even in a country like Russia, which many observers believe presents significant opportunities for materials theft, the ability of terrorists to acquire material is not a given. The CIA has judged that none of the sixteen seizures of Russian weapons-usable material since 1992 was connected to terrorists.[40] On the other hand, the inability of a state to control either its people or its territory (which may or may not be defined as a "failed" state) may present opportunities for terrorists to move freely within a country and take advantage of available resources.

On the other hand, the dual-use nature of many materials and technologies associated with WMD may present terrorists with the ability to enhance their WMD capabilities in countries that do not have an obvious WMD program. In the case of nuclear programs, for example, South Africa could be an attractive target for terrorists because it had a nuclear weapons program and has HEU in metal form under IAEA safeguards. Of course, this attractiveness could be mitigated by good security and low terrorist activity on South African soil. It appears that the Bush Administration has taken the position that weapons-usable material, even if it is under IAEA safeguards, may not be secure enough.[41] One of the seven initiatives highlighted in President Bush's speech on nonproliferation on February 11, 2004 was spending more money to bring back HEU from foreign countries and in May 2004, Secretary of Energy Spencer Abraham announced the Global Threat Reduction Initiative, which would consolidate and accelerate several existing programs to reduce this threat.

In large part, revelations about Iran's nuclear program and the role of Pakistan in supplying uranium enrichment equipment and technology to Iran, Libya, and North Korea has raised a decades-old debate about whether or not certain processes and materials should be controlled internationally or banned altogether. Not since the Atoms for Peace program in the 1950s has international storage of plutonium, or enriched uranium, or international control of enrichment and reprocessing facilities been in vogue. However, the Director General of the IAEA, Dr. Mohamed ElBaradei, suggested just such an approach in 2003, given the situations in North

---

[39] This report does not cover domestic U.S. groups that have attempted to acquire WMD-related capabilities, because of the focus on providing assistance to foreign countries on terrorism and counterproliferation.

[40] CIA unclassified responses to Worldwide Threat Hearing 2003, p. 152.

[41] State Department interview.

Korea and Iran.[42] Although the details are not yet clear, President Bush himself proposed in his February 11, 2004 speech at the National Defense University that enrichment and reprocessing technology should not be spread any further than it already is, and that export controls (national and multilateral agreements) should be tightened to eliminate this possibility.[43]

Cooperative Threat Reduction Program as Precedent

For over a decade, U.S. government agencies (particularly the Departments of Energy and State) have spent nonproliferation assistance funds in countries outside of the former Soviet Union (FSU). Given the new ability to expend DOD's CTR funds outside of the FSU, however, it may be useful to examine the CTR program for precedents, including the origin of the program, its objectives, kinds of work funded, and problems encountered.

Congress enacted the Nunn-Lugar Cooperative Threat Reduction (CTR) program in 1991, addressing, in Senator Lugar's words, "the dominant international proliferation danger: the massive nuclear, chemical and biological weapons infrastructure of the former Soviet Union."[44] As the Soviet Union began to dissolve, Russia could not meet its obligations to reduce strategic nuclear weapons under the START treaty. Further, it became clear that the unraveling of the military industrial complex could have security consequences that transcended the former Soviet Union's borders. The initial legislation allowed the Department of Defense to use unobligated funds to destroy and dismantle strategic nuclear weapons, make transportation and storage of weapons no longer in the stockpile secure, and convert former WMD facilities and scientists.

The CTR program had four key objectives:

- Destroy nuclear, chemical, and other weapons of mass destruction;
- Transport, store, disable, and safeguard these weapons in connection with their destruction;
- Establish verifiable safeguards against the proliferation of these weapons, their components, and weapons-usable materials; and
- Prevent the diversion of scientific expertise that could contribute to weapons programs in other nations.

Destruction and dismantlement activities included removing warheads, deactivating missiles and eliminating launch facilities for strategic weapons under the

---

[42] Dr. Mohamed ElBaradei, "Towards a Safer World," *The Economist*, October 18-24, 2003.

[43] See [http://www.whitehouse.gov] for text of speech.

[44] CTR was an amendment to the implementing legislation of the Conventional Armed Forces in Europe Treaty (P.L. 102-228), sponsored by Senators Nunn and Lugar, in the form of the "Soviet Nuclear Threat Reduction Act of 1991." For more information, see "The Lugar Doctrine," [http://lugar.senate.gov/nunnlugar.html].

START I agreement. Efforts to improve the safety, security, and control over nuclear weapons and fissile materials have included providing storage containers, bullet-proof blankets, secure rail cars, and building a plutonium storage facility at Mayak. Demilitarization projects have included defense conversion projects and International Science and Technology Center projects to help WMD scientists pursue work with peaceful objectives and military-to-military contacts.

CTR programs have evolved and expanded over time, adjusting to Russian, FSU states, and U.S. priorities, as well as to changing perceptions about which threats posed the greatest risk. The programs have also bowed upon occasion to bureaucratic intransigence and practical considerations. In one notable incident, Department of Energy officials provided blankets to facility guards who were leaving their posts to collect wood to build fires. As the economy worsened in Russia in the mid-1990s, CTR projects sought to provide alternative employment and sources of income for unpaid or out-of-work WMD scientists. Increased reports of attempts to steal nuclear material highlighted the need for CTR to address material protection, control and accounting (MPCA) measures for nuclear material, consolidation of nuclear weapons and material, and secure transportation. The United States developed a practical approach: "quick-fixes," like bars on windows, blast-proof doors, fences, followed by a second stage that included more sophisticated security measures like sensors, cameras, and personnel access measures. [45]

The idea that two former adversaries could cooperate on such sensitive matters as nuclear weapons and material security was radical in 1991, but so too was the prospect of Russia's WMD infrastructure unraveling. The circumstances surrounding CTR's inception were unique: there was previous agreement under the START treaty to destroy nuclear weapons, agreement on both sides that those legitimate weapons needed to be secured before they were destroyed, and absence of international inspections because of Russia's status as a nuclear weapons state. Russia had already agreed to destroy weapons — the only questions were how to implement those reductions quickly and who would pay for them. That Soviet nuclear weapons had been targeted at the United States for so many years presented a compelling reason for the United States to help. The same situation arose years later when Russia signed the CWC and CTR funds were used to help destroy those weapons. An issue that could arise in the context of expanding CTR's scope is whether states with stocks of chemical weapons that are bound to destroy them by 2007 under the CWC (India and one anonymous state) will see this as an opportunity to have their obligations paid for by the United States.

Kinds of Assistance

CTR assistance to states outside the FSU might use four types of programs: those that help secure weapons, sites, materials, and personnel. These correspond

---

[45] See remarks by Rose Gottemoeller, former Deputy UnderSecretary for Defense and Nonproliferation in the Department of Energy, in a transcript of Carnegie Endowment for International Peace Nonproliferation Roundtable, held on September 23, 2001, entitled "Pakistan's Nuclear Dilemma," [http://www.ceip.org/files/events/Paktranscript.asp].

roughly to the CTR missions of weapons destruction, ensuring transportation safety, verifiably safeguarding against proliferation, and preventing diversion of scientific expertise. A few differences stand out from the Soviet case: 1) not all of the countries of concern here have actual weapons; 2) some that do have weapons programs belong to treaties that they may be currently violating; and 3) others that have weapons programs have no international restrictions on them and may not have any interest in giving up their weapons. These differences will affect the kinds of assistance the United States might want to provide to those countries and possibly also the kinds of assistance it can legally provide.

Weapons Security

U.S. assistance to most states is unlikely to emphasize weapons security as it did with Russia and the FSU, primarily because potential recipient states will not be as highly armed as Russia. In the nuclear area, measures to improve the chain of command and custody and secure transportation for nuclear warheads would likely be highly controversial if extended to a state outside the NPT. Nonetheless, some observers have advocated assistance to improve nuclear weapons security with the objective of ensuring that weapons could not be stolen or detonated by an unauthorized person. The simplest measures would be funding and training armed guards. However, potential recipient states are likely already aware of the advantages of protecting their nuclear weapons. Advice or equipment to ensure no unauthorized use of nuclear weapons, such as permissive action links (PALs), would require access to nuclear weapons, which is unlikely to be granted. General information on PALs, such as concepts or approaches, is publicly available and would not require access to weapons. In all likelihood, however, India, Pakistan, and Israel probably have exhausted public sources of information on that topic, but North Korea may not have. Measures to ensure that command and control systems work would also help ensure no unauthorized use, but could possibly enhance operational capabilities and therefore may be undesirable.

Assistance in destroying nuclear, biological, or chemical warheads is a different matter. It is assumed that the priority for BW and CW would be destruction, because the respective treaties unequivocally ban those weapons. Temporary security (weeks or months, or perhaps years in the chemical weapons case) of biological and chemical weapons security might be appropriate prior to destruction. In the case of chemical weapons, a non-state party to the CWC presumably could adhere to the guidelines set out under the CWC for destruction, or join the convention, as Libya has decided to do.

Site Security

The CTR programs developed for Russia vary in their goals for site security across the WMD spectrum. For nuclear sites, security measures focused on helping guard against the theft of weapons or materials by insiders or outsiders. Site security with respect to chemical weapons has focused primarily on destruction of weapons capabilities. Finally, site security for biological weapons has focused on dismantlement, safety, and security at facilities for biological pathogens.

Measures include perimeter security, such as gates and other barriers like barbed wire and personnel identification systems, which can help minimize the risk of unauthorized entry. Sensors to detect unauthorized actions (movement, tampering) can help against both insider and outsider threats. Measures to protect against inside theft include checks on personnel leaving facilities (typically onerous without technical detection measures for material or components), cameras in sensitive areas, and accounting and access procedures. Armed guards could help, as would operational and administrative controls.

In Russia, U.S. officials toured sites and conducted vulnerability assessments. In other cases, even perimeter visits could be viewed as too sensitive. However, the United States could offer information or briefings on how security is conducted at sensitive facilities in the United States. Such information would need to be presented in general terms, not specific to particular facilities, to protect U.S. national security. Ideally, assistance could cover types of requirements for personnel vetting and training and development of a security culture. Assistance of this kind in the nuclear area is beginning to be provided under IAEA auspices to India and Pakistan. If the United States wanted to install cameras or sensors at sensitive facilities, licenses might be required for some of them, given restrictions on materials going to sensitive sites (particularly if the state has a history of proliferation). It is more likely, however, that potential recipients would use commercially available security systems, installing them themselves.

Material Security

In the biological area, there are no international standards for pathogen security. While rejecting the Protocol developed by BWC states, the United States has proposed that national authorities develop such measures.[46] Nonetheless, the United States is just beginning to implement such measures in this country.[47] Moreover, even under the rubric of CTR, the United States has not been successful in implementing measures within Russian facilities to guard against the insider threat of theft of pathogens.[48] As many observers have noted, the sample size of biological agents is so small that it would be quite difficult to provide 100% assurance of no material losses. Ken Alibek, who defected from the Soviet BW program in 1992, has noted that some Russian BW labs required laboratory personnel to strip all their

---

[46] Statement by President George W. Bush, November 1, 2001. He proposed that all BWC parties "establish sound national oversight mechanisms for the security and genetic engineering of pathogenic organisms."

[47] Under Secretary of State John Bolton, Remarks at Tokyo America Center, Tokyo, Japan, August 26, 2002, referring to the USA Patriot Act (October 2001) and the Public Health Security and Bio-terrorist Preparedness and Response Act (June 2002).

[48] U.S. General Accounting Office, *Weapons of Mass Destruction: Additional Russian Cooperation Needed to Facilitate U.S. Efforts to Improve Security at Russian Sites,* GA0-03-482, March 2003. See Chapter 4 for discussion of DOD's efforts at Russian facilities related to the BW program.

clothes off before leaving the working zones of the building, but even this did not prevent a few from attempting to smuggle out samples.[49]

Under the CWC, state parties are required to secure CW stocks and agents, and account for quantities of specified chemicals. Most of the verification measures, however, pertain to destroying CW, including continuous monitoring and seals. There is a material accounting system requiring annual reports on destruction, transfer, and use of controlled chemicals. Further, declared sites are subject to challenge inspections.

In the nuclear area, measures to enhance material security in Russia and other FSU ranged from removing material (like highly enriched uranium, HEU, in Kazakhstan and Georgia), blending HEU down into low-enriched uranium so that it would not be usable in a weapon, to permanent storage of plutonium, and finally, to better material protection, control and accounting (MPC&A) measures. Where nuclear material is no longer intended for use, it can be secured at a storage site with tamper-proof seals, cameras, and other monitoring techniques. When it is intended for legitimate industrial or research processes, a system of accounting and control that can follow material flows is used. International nuclear safeguards rely heavily on state systems of accounting and control (SSACs) in measuring physical inventories of materials. Some technical exchanges in these areas may be possible. Some new techniques for securing material in place could be shared (one innovative approach used in Russia was placing heavy cement blocks over plutonium containers). The IAEA and Sandia National Laboratory conduct programs on physical protection of nuclear material. It is also possible to provide equipment for physical protection (cameras, seals, locks, or barriers) under license.

Personnel Security

In the case of the Soviet Union, chaos and poverty combined to create incentives for Soviet scientists to proliferate WMD technology. The U.S. approach generally has been to encourage them to stay in their own country and redirect their work in non-weapons-related areas. U.S. programs have provided financial support through research grants to individual scientists or through the international science centers.[50] Yet, programs also need ultimately to provide secure jobs, interesting work, and an awareness of or commitment to nonproliferation. Programs could also establish a database of relevant scientists in certain states, either to target funding or to track their activities.

Tailoring Assistance to Countries

There is currently no coordinated plan for prioritizing expanded CTR assistance. **Table 2**, below, summarizes potential assistance to critical states in the nexus of

---

[49] Talk before congressional staff by Ken Alibek.

[50] These include the State Department's Bioredirect Program, and DOE's Nuclear Cities Initiative, and the Initiative for Proliferation Prevention.

WMD and terrorism, divided into three tiers. The first tier includes the two "axis of evil" states (North Korea and Iran); the second includes other state sponsors of terrorism (Cuba, Libya, Sudan, and Syria); and the third includes states with WMD programs and terrorist activity on their soil.

Table 2. Priorities for Assistance to States within Terrorism-WMD Nexus

		Weapons Security	Site Security	Material Security	Personnel Security	Terrorism Threat
TIER I	North Korea	Nuclear Chem Bio?	Nuclear Chem Bio?	Nuclear Chem Bio?	?	State sponsor
	Iran	Chem Bio?	Nuclear Chem Bio?	Nuclear Chem Bio?	?	State sponsor
TIER II	Cuba	None	Bio?	Bio?	Less Urgent	State sponsor
	Libya	Chem	Nuclear Chem	Chem	Less Urgent	State sponsor
	Sudan	Chem?	Chem?	Chem?	Less Urgent	State sponsor
	Syria	Chem Bio?	Chem Bio?	Chem? Bio?	?	State sponsor
TIER III	Pakistan	Nuclear Chem?	Nuclear Chem?	Nuclear Chem?	Urgent	Activity
	India	Nuclear Chem?	Nuclear Chem?	Nuclear Chem?	?	Activity
	Israel	Nuclear Chem	Nuclear Chem Bio?	Nuclear Chem Bio?	?	Activity
	Algeria	Chem?	Chem? Bio?	Chem? Bio?		Activity
	Egypt	Chem?	Chem? Bio?	Chem? Bio?	?	Activity
	Saudi Arabia	Chem?	Chem?	Chem?	?	Activity

Sources: CRS. Estimates of WMD capabilities are based on semiannual CIA Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions (per sec. 721 of FY1997 Foreign Intelligence Authorization Act.)

Note on Personnel: The gradation from urgent, to less urgent, to questionable (?) is based on a loose assessment of indigenous scientific and engineering capabilities. More urgency is accorded to states with a known indigenous S&T base and less urgency to states with little or no indigenous capabilities.

Tier I: North Korea and Iran

For North Korea and Iran, there may be equal emphasis placed on all four kinds of assistance. Certainly in the case of North Korea there is a requirement to secure weapons (if not actual nuclear weapons, then certainly chemical and biological weapons), sites, material, and personnel. Many observers believe that the threat posed by North Korea with respect to terrorists and WMD is that the regime itself would sell excess nuclear material (plutonium or highly enriched uranium). Given the extreme isolation of the country, the potential for scientists "freelancing" their WMD wares is probably low. However, North Korea might pose a similar problem as did Russia and the FSU in the 1990s because it does not have an existing market economy. Therefore, interim measures might be needed to sustain former WMD workers on a broad scale. Much would depend on the scope of change that would allow cooperative threat reduction measures to be implemented. For example, one could imagine vastly different programs depending on whether or not North Korea completely dismantled its WMD programs, whether there was a change in government, and/or whether reunification with South Korea was imminent.

Table 3. Assistance to Tier I States

Tier I	Weapons Security	Site Security	Material Security	Personnel Security	Notes
North Korea	Nuclear Chem Bio?	Nuclear Chem Bio?	Nuclear Chem Bio?	?	No inspections now under BWC, only treaty which NK belongs to. Threat from personnel unlikely now, given extreme isolation of regime, but measures should be considered if regime gives up WMD.
Iran	Chem Bio?	Nuclear Chem Bio?	Nuclear Chem Bio?	?	Iran will undergo enhanced inspections under Additional Protocol to NPT. Challenge inspections under CWC?

Sources: CRS. Estimates of WMD capabilities are drawn from semiannual CIA Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions (per sec. 721 of FY1997 Foreign Intelligence Authorization Act).

Iran poses very different issues. From nuclear inspections conducted in 2003, it appears fairly evident that although Iran had made great strides toward putting in place the technical capabilities to produce fissile material for a nuclear weapon, it is unlikely that there are actual nuclear weapons to secure. Following its December 18th 2003 signing of the Additional Protocol to its nuclear safeguards agreement, Iran will be subject to enhanced inspections of its nuclear capabilities, which should help improve nuclear site and material security. IAEA inspections can also provide feedback on nuclear personnel issues, as inspectors develop relationships with scientific personnel. Iran is known to have chemical weapons

and thought likely to have biological weapons. In this context, measures to secure such weapons, their sites, and materials could be useful, if political agreement could be reached on their eradication. As a member of the CWC, however, declaring and inspecting weapons before their destruction would be required.

Iraq is no longer covered in this report as a Tier I state because it was removed from the state sponsors of terrorism list in October 2004. However, the United States budgeted $900 million to the Iraq Survey Group (in FY2003 and FY2004 supplemental requests) to find and destroy weapons of mass destruction. Although no actual weapons were uncovered, sites and material were secured, and a program was established to retrain Iraqi WMD scientists, beginning with a $2M effort by the State Department to provide alternative employment.

Tier II: Cuba, Libya, Sudan, and Syria

Cuba, Libya, Sudan, and Syria comprise the second tier of state sponsors of terrorism with WMD capabilities. Of these four, Cuba and Sudan may pose less serious WMD threats, and Libya agreed in late December 2003 to give up its WMD programs. Concerns over Syria's WMD focus largely on chemical weapons. **Table 4,** below, breaks out these capabilities and potential areas of assistance.

Table 4. Assistance to Tier II States

Tier II	Weapons Security	Site Security	Material Security	Personnel Security	Notes
Cuba	None	Bio?	Bio?	Less Urgent	Intelligence mixed on Cuba's bio program.
Libya	Chem	Nuclear Chem	Chem	Less Urgent	December 2003 agreement with US/UK to give up WMD. Undeclared nuclear capabilities, but far from a nuclear weapon. Heavy reliance on outside sources make personnel issue less threatening.
Sudan	None	Chem?	Chem?	Less Urgent	Chemical weapons aspirations are suspected, even though a signatory to CWC. Challenge inspections?
Syria	Chem Bio?	Chem Bio?	Chem Bio?	?	Strong capabilities in chemical weapons; less certain about bio. Repressive regime may make "freelancing" difficult for scientists

Sources: CRS. Estimates of WMD capabilities are drawn from semiannual CIA Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions (per sec. 721 of FY1997 Foreign Intelligence Authorization Act).

The WMD threat from Cuba focuses mostly on dual-use biotechnology capabilities. Although Undersecretary of State for Arms Control and Nonproliferation John Bolton has highlighted Cuba's BW capability, some intelligence estimates have cast doubt on both Cuba's intentions and capabilities in that area. In short, the intelligence is mixed here. If such a capability were put up for negotiation with the United States, measures would likely focus on site and material security.

In late December 2003, Libya struck a deal with the United States and United Kingdom to give up its WMD programs. Some observers believe this was prompted by Libya's desire to get out from under the yoke of U.S. sanctions resulting from its support of international terrorism and the downing of the Pan Am Flight 103 over Lockerbie, Scotland; U.N. sanctions were lifted in summer 2003. Others believe it was prompted by the example of the war with Iraq over WMD. Regardless, a series of secret inspections revealed some undeclared nuclear capabilities in the uranium enrichment area (centrifuge enrichment), which the IAEA began to inspect in the last week of December 2003. Libya also revealed 10-year-old stocks of mustard agent and some dual-use biological capabilities, but declared it had no BW program. Libya has been mentioned by President Bush as a candidate for the expanded CTR program, particularly in retraining its weapons scientists. U.S. assistance so far has focused on securing materials and sites. Personnel security and retraining may be a less pressing issue, given that Libya relied heavily in all its WMD programs on outside suppliers and thus had limited indigenous capabilities.

Sudan has featured less prominently in Bush Administration descriptions of the threat of terrorism and WMD, and has been lauded for its counterterrorism cooperation. As noted earlier, the most recent CIA unclassified assessment states that "although Sudan has aspired to a CW program, the US is working with Sudan to reconcile concerns about its past attempts to seek capabilities from abroad."[51] Any assistance would likely focus on site and material security; with few indigenous capabilities, personnel security is less likely to be an urgent issue.

Syria has a known CW program and is believed to be seeking biological weapons. Should it agree to give up its chemical weapons, assistance could run the gamut from weapons to personnel security. It is not known to what extent Syrian scientists may have cooperated (with or without government approval) with other states or possibly terrorist organizations. As in other cases of repressive regimes, however, it is possible that "freelancing" opportunities for scientists may have, until now, been quite limited. In the biological area, assistance could focus on site and material security.

---

[51] CIA, *WMD Technology Acquisition*, January-June 2003.

Tier III: States with WMD Capabilities and Terrorist Activities on their Soil

Table 5, below, summarizes kinds of assistance that might be critical to states with WMD capabilities and terrorist activities on their soil, but which are not state sponsors of terrorism.

Table 5. Assistance to Tier III States

Tier III	Weapons Security	Site Security	Material Security	Personnel Security	Notes
Pakistan	Nuclear Chem?	Nuclear Chem?	Nuclear Chem?	Urgent	Nuclear weapons, site, material & personnel security; perhaps most urgent proliferation problem today. Political instability adds to threat. Although a member of CWC, suspected CW capability.
India	Nuclear	Nuclear Chem?	Nuclear Chem?	?	Like Pakistan, also not a member of the NPT. Generally less concern than in the case of Pakistan about terrorist access to nuclear capabilities. CW destruction ongoing as declared under CWC.
Israel	Nuclear Chem	Nuclear Chem Bio?	Nuclear Chem Bio?	?	Presumed tight security on nuclear weapons. CW unknown but thought likely. Bio in R&D stage?
Algeria	Chem?	Chem? Bio?	Chem? Bio?	?	Suspected CW capability; Bio R&D.
Egypt	Chem?	Chem? Bio?	Chem? Bio?	?	Likely CW capability; reported BW research.
Saudi Arabia	Chem?	Chem?	Chem?	?	Suspected CW capability, despite CWC membership.

Sources: CRS. Estimates of WMD capabilities are drawn from semiannual CIA Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions (per sec. 721 of FY1997 Foreign Intelligence Authorization Act.)

In Pakistan, repeated assassination attempts on President Musharraf, allegations and admissions of nuclear assistance to North Korea, Iran, and Libya, and a continuous battle with terrorist elements within the country, have made Pakistan the most crucial node of the nexus of terrorism and WMD proliferation. In addition, a combination of doctrinal preference (for first use of nuclear weapons) and conventional force inferiority has given Pakistan strong incentives to forward-deploy its nuclear forces, leading many observers to conclude that

assistance to secure Pakistan's nuclear warheads could be critical.[52] With respect to the known nuclear program and chemical weapons, assistance could run the range of options, from weapons to personnel security. Recent revelations about Pakistani assistance to the Iranian nuclear program also have heightened longstanding concerns regarding proliferation by prominent scientists, with or without Pakistani government approval. Nonetheless, Pakistani officials' repeated statements to the press about the security of their arsenal appear to reflect a "hands-off" attitude, implying that Pakistan is quite able to protect and secure its own weapons.[53] More importantly, however, the sensitivity surrounding nuclear weapons in the past has been such that even between the closest of allies — for example, the United States and the United Kingdom — proposals to share permissive action links (PALs, which only allow authorized parties to arm the warhead) reportedly were met with disinterest.[54]

The proliferation potential of the Indian nuclear program appears to be less severe than it is for Pakistan. However, Indian suppliers have been sanctioned by the Bush Administration for supplying chemical weapons precursors to countries such as Iraq.[55] India is currently destroying its chemical weapons under the CWC, but some assistance could possibly help speed that process. In both the case of India and Pakistan, assistance in the nuclear area is likely to be severely curtailed by their non-NPT status (see discussion on constraints). Nonetheless, on January 12, 2004, President Bush announced a new strategic partnership with India that would focus on three areas of cooperation: civilian nuclear technology, space technology and high-technology trade.[56] U.S. officials reportedly stated that any space technology must not be used in India's ballistic missile program and civilian nuclear technology must not be used in India's nuclear weapons program.[57]

Israel fits into a similar category as India and Pakistan, but there are several key differences. Israel has adhered to a policy of ambiguity about its nuclear weapons capabilities (which likely would limit its receptivity to assistance) and has not been subject to U.S.-proliferation-related sanctions. Israel has not ever been named as a proliferator by U.S. government sources and few have expressed concerns about the safety or security of its WMD arsenals. Some assistance in securing its nuclear program would likely be curtailed, as in the case of India and Pakistan, by international and U.S. laws prohibiting assistance to states outside the

---

[52] See CRS Report RL31589, *Nuclear Threat Reduction Measures for India and Pakistan*, for a discussion of the pros and cons of such assistance.

[53] Pakistan's Foreign Ministry issued the following statement: "Our nuclear assets are 100% secure, under multiple custody." *Kyoto News Service*, October 2, 2001.

[54] Stein, Peter and Feaver, Peter, *Assuring Control of Nuclear Weapons: The Evolution of Permissive Action Links*, Center for Science and International Affairs, CSIA Occasional Paper No. 2, Harvard University, 1987, p. 86. Stein and Feaver wrote that the United States attempted to describe PAL technology to the British, who did not show much interest.

[55] See [http://www.state.gov/r/pa/prs/ps/2003/17801.htm].

[56] See [http://www.whitehouse.gov/news/releases/2004/01/20040112-1.html] for press release.

[57] "U.S. to Send India Nuclear, Space Technology," *Washington Post*, January 13, 2004.

NPT. Assistance in the CW and BW areas could probably focus on site, material, and personnel security.

Algeria, Egypt, and Saudi Arabia all have significant problems with terrorism on their soil and all three are suspected of having chemical weapons capabilities. Algeria and Egypt additionally are thought to have conducted BW research. Algerian and Saudi CW capabilities could be handled by the OPCW (Secretariat for the CWC), but Egypt is not a member of the CWC.

Constraints on Assistance

There may be political, technical, and legal constraints on U.S. assistance to some of the states mentioned above. Above all, these countries have to be willing to negotiate with the United States on reducing the WMD threat. In the best possible world, that would mean abandoning their WMD programs (like Libya has done); less desirable would be for them to curtail such programs. And in some cases, it may even be difficult for countries to admit they have such programs. States would need to calculate the value of such WMD programs to the state's national security, prestige, and regional stature, the potential benefits for abandoning such programs, and the likelihood of punitive actions by the United States (and/or the world community) if it does not abandon such programs. Such political constraints may pose the most formidable hurdles to U.S. assistance.

Technical hurdles are clearly secondary constraints, but they can lead to questions about the effectiveness of verifying threat reduction programs. CTR programs in the former Soviet Union, despite political willingness to participate in the CTR program, have been dogged for years by questions about their effectiveness for both political and technical reasons. Technical constraints stem primarily from incomplete knowledge of a country's WMD program, which makes it difficult to scope and prioritize the proliferation problems. Lastly, there may be legal hurdles in providing assistance, both because of U.S. treaty obligations and domestic laws prohibiting assistance to proliferators and state sponsors of terrorism.

Political Constraints

In some cases, no amount of pressure from the United States is likely to convince some states to give up certain WMD programs — for example, the nuclear programs of India, Pakistan, and Israel. These states perceive nuclear weapons as crucial to balancing regional security, and ultimately, to their own survival. Barring a change in the regional balance of power that would make nuclear weapons unnecessary, there likely will be strong resistance to efforts to increase transparency of those weapons programs. And, in fact, transparency may not always improve stability in some regions, nor may it be perceived to help a country's national security. One could argue that in the case of North Korea, ambiguity has served its national security better than the relative transparency of the Agreed Framework years. In the Middle East, countries such as Israel, Iraq, and Iran have relied on ambiguity or outright deception to mask their WMD

programs. In the case of Pakistan, which has taken fewer pains to hide its nuclear program, its history of clandestine foreign procurement and sales of sensitive technologies could make greater transparency politically painful. In short, a culture of secrecy, which was not easily overcome in the case of Russia, may be as difficult, if not more difficult, to overcome in the case of other states. On the other hand, professional pride on the scientific or military levels may provide for some cooperation.

Other countries may perceive direct and indirect benefits to foreswearing WMD programs. Such countries are unlikely to be lured merely by the promise of nonproliferation assistance, but adhering to the nonproliferation regime may bring greater political acceptance, more technical assistance in other areas, and the lifting of sanctions. Many observers believe that Libya was largely motivated to foreswear its WMD programs because it was one of the last major concessions required before lifting U.S. sanctions. In addition, however, Libyan leaders may have perceived their WMD programs as no longer vital to Libya's national security, regional stature, or prestige. Some might argue that Libya gave up its WMD precisely because they were not very successful programs. This is exactly the kind of cost-benefit analysis U.S. nonproliferation efforts seek to promote.

Assuming, whether coerced or persuaded, a country has ended its WMD programs, some constraints may still arise. In the case of Iraq, the U.S. search for WMD-related items and to provide for site, material, and personnel security, has been hampered by the chaos caused by the war and a decade of deception. For example, there is a significant gap in information about mid-level Iraqi WMD scientists, which complicates decisions about who should receive assistance. In general, incomplete knowledge of a country's WMD program can complicate provision of assistance. In the case of Russia, political willingness to accept assistance did not extend to all areas of Russia's WMD programs. For example, U.S. officials have never gained access to the four military facilities associated with Russia's biological weapons program. With respect to nuclear material protection, control, and accounting programs, most of the material, according to one report, remains outside of the program because the United States cannot gain access to sensitive facilities.[58] It is not difficult to imagine that the same levels of secrecy encountered in the case of Russia might be encountered in other states. It is possible that more secrecy may be attached to biological and nuclear weapons programs than for chemical weapons programs. In addition, it may be possible to know about some kinds of sites (dual-use facilities like chemical production sites, uranium enrichment or plutonium reprocessing) but not others — for example, weapons machining or assembly sites.

If a country has made a decision to end one but perhaps not other WMD programs (e.g., Pakistan decides to give up chemical weapons but not nuclear weapons), the need to preserve secrecy about the other WMD program(s) may limit transparency. If a country accepts some assistance for an ongoing WMD program (e.g., Pakistan accepts security assistance for its nuclear warheads but

---

[58] U.S. General Accounting Office, *WMD: Reducing the Threat from the Former Soviet Union: An Update*, GAO/NSIAD-95-165, June 1995.

does not give them up), providing such assistance could raise the question of whether the United States tacitly accepts that WMD program. In fact, some kinds of assistance (like permissive action links to make nuclear weapons safe from unauthorized use) could be viewed as actively helping a WMD program and would likely be prohibited by U.S. and international laws (see Legal Constraints discussion below).

The existing level of cooperation between the United States and some of these countries will likely affect some aspects of assistance. A country that has not been cooperating with the United States on counterterrorism may be less likely to cooperate on nonproliferation. On the other hand, a country like Pakistan, which has been cooperating closely with the United States in the war on terrorism, may be given a "free ride" on proliferation, for fear of eroding antiterrorism cooperation and jeopardizing delicate political balances in the region.

Technical Constraints

There are two basic technical constraints in providing assistance: getting accurate information and being able to verify it and ensuring that assistance does not aid or benefit a WMD capability that will continue to exist.

Information about weapons of mass destruction programs is closely held even in the most open of societies. While U.S. intelligence assets can pick up remarkable details about WMD programs, the recent U.S. government assessments of WMD capabilities in Iran, Iraq, North Korea, and Libya point strikingly to the fact that what we know is just a small fraction of the entire picture. Even for advanced WMD programs that have existed for years, details are few. Recently a senior Bush administration official was quoted on Pakistan's nuclear program, saying "It's what we don't know that worries us, including the critical question of how much fissile material Pakistan now holds — and where it holds it." [59]

Although the United States is certain that North Korea has a uranium enrichment program, it has only been able to narrow down the location of an enrichment plant to three sites. For chemical and biological weapons programs, which rely on extensive dual-use materials and facilities, there may be even fewer details on which to base assessments. Information from the defector Ken Alibek revealed a far more extensive Soviet BW program than previously thought and even though the U.S. CTR program has elements for BW site, material, and personnel security, there are few who would agree that we know the full extent of the program even today.

In general, it may be possible to know more about material production sites than about weapons production/assembly or weapons storage sites. Without knowledge of where vulnerabilities lie, it will be difficult to target even the most rudimentary assistance. In the case of Russia and the NIS, U.S. government officials have complained for years that Russia has not provided the kinds of

---

[59] "A Nuclear Headache: What if the Radicals Oust Musharraf?" *New York Times*, December 30, 2003.

access necessary for the United States to ensure that its goals are being met. With respect to the material protection, control and accounting programs, most of the material, according to one report, remains outside of the program because the United States cannot gain access to sensitive facilities.[60]

A second technical hurdle is ensuring that U.S. assistance does not improve WMD capabilities. Some kinds of assistance do not run this risk — for example, providing physical security barriers for facilities or improving personnel reliability testing. Improving weapon transportation and storage security, however, might run such a risk. Some innovations may have unintended consequences. For example, permissive action links, which were developed by the United States in the 1960s, were designed so that unauthorized users would not be able to produce a nuclear yield from the weapon. At the same time, however, it was recognized that weapons with PALs on them are more deployable. Such devices, if given to India and Pakistan in the name of decreasing the possibility that such weapons could be stolen and used, could also increase those weapons' operational readiness.

Legal Constraints: Treaty Obligations

Treaty obligations may play a small role in limiting assistance, both from the perspective of U.S. obligations and for the states in question. The relevant treaties are the Nuclear Nonproliferation Treaty (NPT), the Chemical Weapons Convention (CWC), and the Biological and Toxin Weapons Convention (BWC). The United States is a party to all three treaties. Each of these treaties contains language that generally prohibits transferring such weapons, assisting, encouraging or inducing any other state (under the NPT, non-nuclear weapon states) to manufacture or acquire weapons. (For the text of the relevant language in each treaty, see Appendix A.) In addition, the United States is prohibited by the NPT from helping non-nuclear weapon-states "control" nuclear devices (with the term "control" left undefined) and prohibited under the CWC from engaging in preparations to use chemical weapons, which could be broadly interpreted.

In general, questions of treaty compliance were not publicly raised by U.S. assistance to Russia and the FSU. Nuclear assistance to the Soviet Union, because it was a nuclear weapons state by the terms of the NPT, was never questioned. In the CW area, most of the assistance to Russia has focused on helping Russia comply with the CWC (primarily in destruction). While some CW scientists may have participated in the International Science Centers, there has been no public criticism that assistance has helped the Russian CW program. With respect to Russia's biological weapons program, there has been some uncertainty about whether assistance to BW scientists in certain institutes could benefit the Russian BW program, but no one has publicly suggested that the United States has not complied with its BWC obligations.[61]

---

[60] U.S. General Accounting Office, *WMD: Reducing the Threat from the Former Soviet Union: An Update.* GAO/NSIAD-95-165, June 1995.

[61] U.S. General Accounting Office, *Biological Weapons: Effort to Reduce Former Soviet* (continued...)

Nuclear Nonproliferation Treaty (NPT). Under Article I of the NPT, the United States is prohibited from transferring to any state (nuclear weapon state, non-nuclear weapon state, party or non-party to the Treaty) nuclear weapons, nuclear explosive devices or control over such weapons or devices, directly or indirectly. It is not readily apparent what is meant by "control" over such weapons; a narrow interpretation would focus on the ability of another state to use such a weapon.[62] A broader interpretation might conclude that better safety, security, or command and control measures would provide another state with improved control of its nuclear weapons, perhaps violating this obligation not to (indirectly) transfer control.

The second part of the obligation lies in not assisting, encouraging or inducing non-nuclear weapon states to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices. The negotiators of the NPT reportedly intended to interpret "manufacture" broadly, from the beginning of the acquisition cycle to the end.[63] Non-nuclear-weapon states party to the NPT are obligated not to seek or receive any assistance in the manufacture of such weapons under Article II.[64] Presumably, this would cover assistance that enhanced command and control of weapons, including permissive action link (PAL) technology. India, Pakistan, Israel, and North Korea would not be bound by such an obligation since they are not parties to the NPT. Iran, on the other hand, would be bound by that obligation.

The U.S. State Department has not made a public finding on what might constitute a violation of Article I under the NPT, but its legal advisors have examined precedents in the application of U.S. domestic law. In general, they have advised that the closer assistance is attached to the nuclear weapons programs, the more likely it could run afoul of U.S. legal obligations, both under international treaty obligations and domestic law. Thus, some kinds of aid (e.g., food or humanitarian aid) could be considered, in the extreme, to be assisting or

---

[61] (...continued)
Threat Offers Benefits, Poses New Risks, GAO/NSIAD-00-138, April 2000. See discussion of risks of assistance, which include sustaining Russia's existing BW infrastructure, maintaining or advancing Russian scientists' skills to develop offensive BW and potential misuse of U.S. assistance to fund offensive research, pp. 29-34.

[62] During the negotiation of the NPT, concerns about transferring "control" focused on allies (e.g. NATO) making command and control decisions for U.S. nuclear weapons deployed in Europe. See Willrich, *Nonproliferation Treaty*, p. 71 ff. Stein and Feaver argue that Permissive Action Links were introduced as a result of congressional concern about loose command and control of U.S. nuclear weapons in Europe. See also Feaver, Peter Douglas, *Guarding the Guardians*, (NY: Cornell University Press, 1992), pp. 199ff.

[63] Willrich, *Nonproliferation Treaty*, pp. 91-93.

[64] "Each non-nuclear-weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices." Article II of the Treaty on the Non-Proliferation of Nuclear Weapons.

encouraging a nuclear weapons program because they free up resources that the target government can put towards a nuclear weapons program but are permitted in practice because they do not have a close association with a nuclear weapons program. If assistance took the form of transferrable funds, however, the possibility of linkage to a nuclear weapons program might be considered to be greater. Title XIII of the FY2004 Defense Authorization Act (P.L. 108-136) prohibits the transfer of funds.

Chemical Weapons Convention (CWC). There are two provisions in Article I of the CWC that might affect U.S. assistance: first, the prohibition on engaging in any military preparations to use chemical weapons; and second, the prohibition on assisting, encouraging, or inducing, in any way, anyone to engage in any activity prohibited to a State Party under this Convention. Although U.S. assistance clearly would not aim to contravene the treaty, some actions, even temporary, could be interpreted as violating that obligation if they resulted in greater security of chemical weapons and not immediate destruction. If weapons security measures were implemented (e.g., security from terrorist access), they would need to be accompanied by demilitarization measures (separation from weapon launchers, etc.). As evidenced by delays in the destruction of the U.S. chemical weapons stockpile, destruction could take years. Any such activities with non-CWC parties (Egypt, Iraq, North Korea, and Syria, for purposes here) could be interpreted as falling under the prohibition against assisting, encouraging, or inducing...*anyone* to engage in any activity prohibited under the Convention.

Biological Weapons Convention (BWC). As in the cases of the NPT and CWC, a key provision here may be the prohibition on assistance, encouragement, or inducing of any State, group of States or international organization to acquire agents, toxins, weapons, equipment, or means of delivery prohibited by the Convention. Measures that included just assistance to scientists but not BW destruction, or measures that included weapons and site security but no destruction might fall into that category. The likelihood is small, but future recipients may be just as reluctant as the Russians have been to allow access to the most sensitive BW-related sites, accepting assistance at lesser sites.

Legal Constraints: Nonproliferation and Anti-Terrorism Laws

U.S. domestic laws contain the following restrictions that may be relevant to providing assistance to the states covered in this report:

- restrictions on financial assistance, exports (defense and dual-use) to states that have poor proliferation records (as recipients or suppliers of proliferation-related goods and technology)
- restrictions on financial assistance, exports to states on state sponsors of terrorism list
- restrictions on nuclear material and nuclear weapons cooperation

Many of these restrictions overlap in the legislation. For example, the Foreign Assistance Act carries prohibitions for both proliferation- and terrorism-related activities. **Table 6**, below, lists the key legislation.

Table 6. Applicable Laws for Proliferation and Terrorism

Title	Proliferation Sanctions	Terrorism Sanctions	Effect	Countries Affected	Presidential Waiver?
Export-Import Bank Act of 1945 (P.L. 79-173; P.L. 107-189)	X Sec 2 (b) (4) Nuclear	X	Financing cutoff for those who violate nuclear safeguards agreement and those who detonate nuclear explosive device after 1977.	North Korea, Iraq (waived), Iran, Cuba, Libya, Sudan, Syria, Pakistan (waived), India (waived)	Yes
Atomic Energy Act of 1954 (P.L. 83-703)	X Nuclear, Sec. 129		No nuclear cooperation	North Korea, Iraq (waived), Libya (?), Pakistan (waived), India (waived), Israel	Yes
Foreign Assistance Act of 1961 (P.L. 87-195)	X Sec 620 E (e) (Pressler) Sec 620 (y)	X Sec 620 A Sec 620 G Sec 620 H	Aid cutoff No foreign/food aid, Ex-Im bank for states on terrorism list No military assistance for detonation of nuclear weapon Third-party sanctions for aid to Cuba's nuclear program	North Korea, Iraq (waived), Iran, Cuba, Libya, Sudan, Syria, Pakistan (waived)	Yes Anti-terrorism, humanitarian, narcotics, IMET, peacekeeping OK Ended if joins NPT, nuclear safeguards, nuclear safety

Title	Proliferation Sanctions	Terrorism Sanctions	Effect	Countries Affected	Presidential Waiver?
Arms Export Control Act (P.L. 90-629); as amended by Nuclear Proliferation Prevention Act 1994 (P.L. 103-236, Title VIII)	X WMD & missiles Chapters 7 & 8	X 40 A (not cooperating fully with anti-terrorism measures)	Exports, aid cutoff Sanctions for engaging in export activities that contribute to proliferation (Section 821) Role of international financial institutions (Section 823) Prohibition on assisting nuclear proliferation through provision of financing (Section 824)	North Korea, Iraq (waived), Iran, Cuba, Libya, Sudan, Syria, Pakistan (waived), India (waived)	Yes
Export Administration Act 1979 (P.L. 96-72)	X Sections 5, 6, 11 for WMD & missiles	X Sec 6 (j) terrorism list	1. Export controls for national security & foreign policy reasons, including terrorism 2. No US govt contracts with Wassenaar violators 3. No export licenses for missile proliferation violations 4. US govt contract/import sanctions for CBW exports	North Korea, Iraq, Iran, Cuba, Libya, Sudan, Syria	Yes
Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 (P.L. 102-182, Title III)	X Chem, bio		Sanctions if CW or BW used	None yet	Yes?
Iran-Iraq Arms Nonproliferation Act of 1992 (P.L. 102-484, Title XVI)	X		Third-party sanctions, consistent with existing laws	States, persons supplying Iran, Iraq with WMD-related items	Yes
Iran & Libya Sanctions Act (P.L. 104-172)	X	X	Third-party sanctions, consistent with existing laws	States, persons supplying Iran & Libya with WMD-related items or advanced conventional weapons	Yes

Title	Proliferation Sanctions	Terrorism Sanctions	Effect	Countries Affected	Presidential Waiver?
Iran Nonproliferation Act of 2000 (P.L. 106-178)	X		Third-party sanctions, consistent with existing laws	States, persons supplying Iran with WMD-related items	Yes
North Korea Threat Reduction Act of 1999	X Nuclear		Prohibited assistance to DPRK & KEDO under Agreed Framework; Strengthened requirements for nuclear cooperation agreement	North Korea	Yes
Foreign Operations, Export Financing-Related Programs Appropriations Act, 2004 (P.L. 108-199)		X	Sec 507 prohibits direct funding to state sponsors of terrorism Sec 527 prohibits bilateral assistance under this act to any country which the President determines a) grants sanctuary to terrorists; b) otherwise supports international terrorism	Sec 507: Cuba, Libya, North Korea, Iran, Syria Sec 527: others?	No waiver for Sec. 507 Yes for Sec 527 for national security or humanitarian reasons;
Syria Accountability Act of 2003 (P.L. 108-175)	X	X	Export controls: no munitions list or dual-use items Choice of 2 of 6 sanctions	Syria	Yes

Nonproliferation Laws. Nonproliferation laws generally seek to prohibit sensitive technologies from going to states that are suspected proliferators and to impose sanctions on states and individuals for objectionable proliferation behavior. Many of these laws have provisions for a waiver if the President determines that U.S. national security interests are better served by engagement rather than restrictions. (A complete list of legislation is available in CRS Report RL31502, *Nuclear, Biological, Chemical, and Missile Proliferation Sanctions: Selected Current Law,* and CRS Report RL31559, *Proliferation Control Regimes: Background and Status*.)

In brief, the Atomic Energy Act of 1954 and the Nuclear Nonproliferation Act of 1978 (NNPA) ensure that U.S. nuclear technology will not go to proliferators; for the most part, it is unlikely that the kinds of assistance the United States might offer under an expanded CTR program (for weapons, site, material, or personnel security) would fall under the categories covered by these laws. The Foreign Assistance Act and the Arms Export Control Act punish proliferators by prohibiting U.S. military sales and economic or military assistance. The Export Administration Act of 1979 restricts exports of goods and technologies, including dual-use technologies, for foreign policy and national security reasons, and the Export-Import Bank Act of 1945 includes restrictions on the extension of credit for proliferation reasons. It should be noted that all proliferation-related sanctions against Pakistan and India stemming from the 1998 nuclear explosive tests have been lifted; many of these constraints can be lifted by Presidential waiver.

Anti-terrorism Laws. Sanctions against other countries for their support for international terrorism are four basic types:

- ban on arms-related exports and sales
- controls on dual-use item exports (requires 30-day congressional notification)
- prohibition on economic assistance
- miscellaneous financial and other restrictions, including U.S. opposition to World Bank, IMF loans, and ban on DOD contracts over $100,000.[65]

The specific laws that contain these bans have been described in great detail in other CRS reports.[66] In general, Cuba, Libya, and Iran are all subject to comprehensive embargoes; North Korea is subject to economic sanctions, and Sudan and Syria are subject to specific sanctions. In addition, Iran and Libya are subject to the Iran and Libya Sanctions Act.

Perhaps the most salient legislation is what has become known as the "state sponsors of terrorism list," as provided for in Section 6 (j) (1) of the Export Administration Act of 1979 (50 U.S.C. App. 2405(j)l). States can be removed from

---

[65] *Patterns in Global Terrorism 2002*, p. 77.

[66] See, for example, CRS Issue Brief IB92075, *Syria: U.S. Relations and Bilateral Issues;* CRS Report RL32048, *Iran: U.S. Concerns and Policy Responses*; CRS Report RS21699, *Libya: Legislative Basis for U.S. Economic Sanctions*; CRS Report RL31696, *North Korea: Economic Sanctions,* CRS Report RL32251, *Cuba and the State Sponsors of Terrorism List.*

that list in two ways. First, the President could submit a report to Congress certifying that (1) there has been a fundamental change in the leadership and policies of the government of the country concerned; (2) the government is not supporting acts of international terrorism; and (3) the government has provided assurances that it will not support acts of international terrorism in the future. The second option is for the President to submit a report to Congress, at least 45 days before the proposed recision will take effect, justifying the recision and certifying that (1) the government concerned has not provided any support for international terrorism during the preceding six-month period; and (2) the government has provided assurances that it will not support acts of international terrorism in the future.

In addition, however, two other "terrorism lists" may apply. The first is Section 40 of the Arms Export Control Act, which prohibits the export of munitions to governments that repeatedly provide support for international terrorism, and Section 620A of the Foreign Assistance Act of 1961, which prohibits most assistance to countries supporting international terrorism. Section 40 of the AECA has a specific procedure for Congress to consider a joint resolution to block the President's removal of a country from the terrorism list. Both Section 40 of the AECA and Section 620A of the FAA include presidential waiver authority for national security interests or humanitarian reasons. It is likely that a sweeping lift of sanctions would occur only in the context of overall improved relations and with Congressional concurrence that the sanctions regime ought to be undone.

Nuclear Cooperation/nuclear Weapons Cooperation. The Atomic Energy Act (AEA) governs nuclear cooperation and restricts sharing of information related to nuclear weapons. It is unlikely that the United States would include "significant" nuclear cooperation with any of the states in question under an expanded CTR program (e.g., sales of nuclear reactors, nuclear material, or major reactor components.[67]). Significant nuclear cooperation with states such as India, Pakistan, Israel, or North Korea would require that they abandon their nuclear weapons programs and adopt full-scope safeguards.[68] Moreover, Section 129 of the AEA states that

> No nuclear material and equipment or sensitive nuclear technology shall be exported to: (1) any non-nuclear-weapon state that is found by the President to have, at any time after March 10, 1978 a) detonated a nuclear explosive device; or b) terminated or abrogated IAEA safeguards; or c) materially violated an IAEA safeguards agreement; or d) engaged in activities involving source or special nuclear material and having direct significance for the manufacture or acquisition of nuclear explosive devices, and has failed to take steps which, in the President's judgment, represent sufficient progress toward terminating such activities...

---

[67] Major reactor components include primary coolant pumps, pressure vessels, control rod drive systems, and on-line fuel charging and discharging equipment for CANDU reactors.

[68] It is not clear whether the Bush Administration intends to conduct "significant nuclear cooperation" with India under the new strategic partnership and if so, whether it intends to waive the nonproliferation requirements for implementing a nuclear cooperation agreement with India.

Some states are additionally subject to country-specific restrictions on nuclear cooperation agreements. For example, the North Korea Threat Reduction Act of 1999 stipulated that no significant nuclear cooperation could occur with North Korea unless relevant congressional committees were informed that North Korea: a) was in full compliance with its nuclear safeguards agreement; b) gave the IAEA full access to nuclear sites; c) took steps to implement the Joint Declaration on the Denuclearization of the Korean Peninsula; d) had no enrichment or reprocessing activities and made no significant progress in acquiring, testing, producing, or deploying a nuclear explosive device; and e) had no nuclear weapons. In addition, the President must notify Congress that the transfer of key nuclear components was in the national security interests of the United States. Some of these requirements are already contained in existing laws, but others are not — for example, implementing the joint declaration.

In the event that the United States contemplates sharing sensitive nuclear information (e.g., information related to safety and security of nuclear weapons), Section 144 of the AEA stipulates that the Secretary of Energy may release Restricted Data on various aspects of the nuclear fuel cycle except those related to the design or fabrication of atomic weapons. The Secretary of Defense may exchange Restricted Data if it is necessary to a) develop defense plans; b) train personnel in employing and defending against nuclear weapons; c) evaluate the capabilities of potential enemies in employing nuclear weapons; d) develop compatible delivery systems for nuclear weapons.

The President can authorize the Secretary of Energy, with the assistance of the Department of Defense, to exchange Restricted Data on atomic weapons with another country provided that a) communication of Restricted Data is necessary to improve that nation's nuclear weapon design, development, or fabrication capability; and b) that nation has made "substantial progress in the development of atomic weapons." When the language on "substantial progress" was added in 1958, the only nation that met the qualification was the United Kingdom. In general, most weapons-related data, including some on safety, security, fuze and firing, are classified as restricted data or formerly restricted data. It is unlikely that the President would authorize such an exchange of Restricted Data under this provision of the Atomic Energy Act, particularly to states such as India and Pakistan.

Dual-Use Exports. Transfers of nuclear-related equipment or nuclear material that do not meet the requirement for an agreement of cooperation could possibly still require full-scope safeguards as a condition of supply under the Nuclear Suppliers' Group (NSG) guidelines. Since 1992, NSG member states have required full-scope safeguards as a condition for supplying items on the NSG "trigger list."[69]

---

[69] The "trigger list" governs the "export of items that are especially designed or prepared for nuclear use. These include (i) nuclear material; (ii) nuclear reactors and equipment therefor; (iii) non-nuclear material for reactors; (iv) plant and equipment for the reprocessing, enrichment and conversion of nuclear material and for fuel fabrication and heavy water production; and (v) technology associated with each of the above items." The "dual-use" list governs the export of nuclear related dual-use items and technologies, that is, items that can make a major contribution to an unsafeguarded nuclear fuel cycle or (continued...)

In addition, the Department of Commerce requires a license for exporting items on the NSG's dual-use list (those with nuclear and other applications) to states outside the NSG. Many of the states that could be potential recipients of U.S. CTR assistance are not members of the NSG.

More broadly, the Commerce Control List specifies what items are regulated and why, but an equally important consideration is the question of the end-user. One technique for streamlining the export control system and making it more understandable for exporters was the development of the entities lists. The Department of Commerce maintains a list of entities subject to license requirements (see Supplement 4 to Part 744 of the Export Administration Regulations). At present, the entities of proliferation concern are located in China, India, Israel, Pakistan, and Russia. Exports of items controlled for nuclear proliferation and missile technology reasons are reviewed on a case-by-case basis.

Under the 1990 Enhanced Proliferation Control Initiative (EPCI), the Department of Commerce can impose licensing requirements on exports and reexports of goods and technology that would normally be uncontrolled where there is an unacceptable risk of diversion to activities related to nuclear, chemical or biological weapons or missile proliferation. U.S. exporters are required to apply for a license if they have knowledge of or have reason to know that such exports will be used directly or indirectly in any one of the following activities: nuclear explosive activities, unsafeguarded nuclear activities, or safeguarded and unsafeguarded activities to produce special nuclear material (through reprocessing or enrichment), produce heavy water or fabricate nuclear fuel that uses plutonium. Section 744.2 of the Export Administration Regulations provides eight criteria for assessing license applications. Potentially, the most significant of these criteria is the nonproliferation credentials of the importing country, which include whether the state adheres to the NPT, has full-scope safeguards, and has an agreement for cooperation with the United States and whether the actions, statements, and policies of the state support nuclear nonproliferation.[70]

Costs and Benefits of Assistance

The United States has provided nonproliferation assistance to many countries over many years. In some instances, the United States funded projects or programs because the country in question did not have the resources to fix proliferation problems. However, as the United States looks increasingly to bilateral "fixes," two

---

[69] (...continued)
nuclear explosive activity, but which have non-nuclear uses as well, for example in industry. See [http://www.nsg-online.org/guide.htm].

[70] Paragraph 744.2 (d) License Review Standards for Restrictions on Certain Nuclear End-Uses, Part 744 of Export Administration Regulations. The assessment of nonproliferation credentials is based on a) adherence to NPT or international nuclear nonproliferation agreement; b) full-scope safeguards or equivalent; c) agreement for cooperation with US; d) whether state supports nuclear nonproliferation; e) degree to which state cooperates in nonproliferation policy; and f) intelligence data on state's nuclear intentions and activities.

questions need to be raised: are there enough resources for the United States to tackle these multiple problems, and do bilateral approaches undermine the multilateral nonproliferation regime? Two potential costs of undermining international institutions are decreased global pressure on proliferators and possibly decreased international support for U.S. policy objectives in other areas. A bilateral approach may risk capturing the "easy" proliferation problems — like Libya — and undermining support to tackle the "hard" proliferation problems — like Pakistan and North Korea. Without clear disarmament steps, assistance could be seen as rewarding bad behavior, which has been a recent U.S. concern in the case of North Korea.

Impact on Nonproliferation Regime

For states that are parties to the NPT, BWC, and/or CWC, some treaty compliance issues may arise. In the case of the BWC, which does not have an inspection regime, there likely will be less controversy about bilateral inspections superceding or undermining the treaty. Likewise, there may be less pressure to bring noncompliance issues to light. For example, Russia, a party to the BWC, declared that it had an offensive BW program in 1992, twenty years after it signed the treaty.

In the case of the CWC, compliance issues might be handled differently. Under the CWC, Iran, Pakistan, Saudi Arabia, Sudan, and Israel have not openly declared stockpiles or capabilities and yet all are suspected of having CW. For example, if Pakistan has a covert chemical weapons stockpile that it is willing to dismantle with U.S. help, should Pakistan be declared in violation of the CWC? Further, would destruction be verified bilaterally or multilaterally under the CWC? In the case of Libya, the OPCW is overseeing CW destruction, but the United States has taken on the destruction tasks related to Libya's nuclear program. If U.S. or other sanctions were applicable, would they need to be waived?

Hard-core nuclear proliferators pose a different challenge. These states have remained steadfastly outside the treaty regime and are unlikely to dismantle their arsenals (with the possible exception of North Korea). If assistance were accepted, would this confer acceptance of their nuclear weapons status? Would such acceptance be good or bad for the nonproliferation regime? Recent Bush administration statements seem to imply an acceptance of Indian and Pakistani nuclear weapon status. On January 2, 2004, President Bush stated that "he believes the [Pakistani nuclear] weapons "are secure." "That's important," he said. "It's also important that India, as well, have a secure nuclear weapons program."[71] On the other hand, it is clear that nuclear weapons status will not be awarded to Iran, and North Korea's case still seems ambiguous.

For some observers, the impact of assistance to "new nuclear states" on the nonproliferation regime is moot because the nuclear programs of India, Pakistan, Israel, North Korea, Iran, and, formerly, Libya, prove that the regime is broken. Some observers also believe that CWC or BWC treaty compliance is essentially

---

[71] "Bush Says Pakistan's Arsenal is Secure," *Washington Post*, January 2, 2004.

impossible to verify and that new tools should be used to mitigate the threat wherever possible.

Issues for 109th Congress

Sea Changes in Policy?

Many U.S. administrations have fought both proliferation of WMD and terrorism but few have connected or coordinated the two. A policy that seeks to eliminate the nexus of terrorism and WMD confronts more than a few challenges. One particular challenge is obtaining active cooperation from a diverse group of states around the world, many of which are not traditional allies of the United States. According to one observer, the United States hasn't made really clear "how...a former state supporter of terrorism stand(s) with the United States and with the rest of the international community in dealing with that common scourge."[72] Libya may provide an unfolding example of how a former state supporter of terrorism can be redeemed.

An equally challenging question may be how states that were considered former proliferators stand with the United States and the rest of the international community. Here, Libya may not offer the best example. Although a long-time successful supporter of international terrorism (albeit with waning activity in the last decade), Libya was at best a mediocre proliferator, and decided to give up both activities in exchange for the lifting of burdensome economic sanctions. A more troubling example would be states that retain their WMD programs but not the stigma of being a proliferator. Pakistan raises the largest issue for the Bush Administration in its matrixed war against terrorism and weapons of mass destruction proliferation: has one goal assumed priority over the other? There have been ample statements from administration officials since 2001 to the effect that Pakistan has not been pressed on its proliferation activities because of its strong support in the war against terrorism. Despite evidence of sales of uranium enrichment equipment to Iran and Libya (and, the Bush administration maintains, to North Korea), Pakistani proliferation activities since 2001 are no longer reported to Congress in the semi-annual unclassified Section 721 (of the FY1997 Intelligence Authorization Act) reports on the acquisition of technology relating to weapons of mass destruction and advanced conventional munitions.

The sea change in nonproliferation policy can be traced to the September 2002 National Security Strategy, in which President Bush noted that "The gravest danger our nation faces lies at the crossroads of radicalism and technology. Our enemies have openly declared that they are seeking weapons of mass destruction." A few months later, the December 2002 *Strategy to Combat Weapons of Mass Destruction* opened with the statement, "Weapons of mass destruction (WMD) — nuclear, biological, and chemical — **in the possession of hostile states and terrorists** represent one of the greatest security challenges facing the United States." [emphasis added] Focusing on the terrorism axis has shifted policies to combat WMD proliferation away from global approaches (at least rhetorically) to tailored

---

[72] PBS Newshour interview with David Mack on Libya, August 18, 2003.

approaches. Paradoxically, this focus on hostile states and terrorists may leave the global community vulnerable to the proliferation activities of friendly states, whoever those happen to be at the time.

Legislation in the 109th Congress

The 108th Congress considered a few bills that specifically would have prohibited assistance to some of the countries in question, including H.R. 3137 (to prohibit assistance or reparations to Cuba, Libya, North Korea, Iran, Saudi Arabia, and Syria), H.R. 3643 and S. 1888 (the "Saudi Arabia Accountability Act," to stop Saudi support of terrorism) and S. 145 (To prohibit assistance to North Korea or the Korean Energy Development Organization). The 108th Congress enacted P.L. 108-175, the "Syria Accountability and Lebanese Sovereignty Restoration Act of 2003," and the President chose to ban munitions and dual-use items to Syria as well as the export of any productions other than food or medicine and aircraft landings and overflights.

However, as noted above, Senator Lugar introduced S. 2908, "Nunn-Lugar Cooperative Threat Reduction Act of 2004," which sought to improve on the authorities in the FY2004 Defense Authorization Act (P.L. 108-136) by eliminating some of the restrictions inherent in spending CTR funds, as well as by eliminating the $50 million cap on spending unobligated funds. This legislation is likely to be reintroduced in the 109th Congress. The successful expenditure of some of those FY2004 unobligated CTR funds to eliminate chemical weapons stockpiles in Albania may give further impetus to expand the application of CTR to other states. In addition, the Department of Energy announced its own Global Threat Reduction Initiative in May 2004, and may request additional funds in the next budget cycle.

Costs

In its oversight capacity, Congress may wish to consider whether or not expanding CTR assistance could have a "snowball" effect, particularly if the United States insists on using its own resources rather than existing multinational inspectorates. Costs of assistance are likely to be minimal the first one or two years, but these could escalate, depending on the objectives of the program. In the nuclear area, the nuclear programs of India, Pakistan, Israel, and North Korea are far smaller than Russia's and unlikely to incur the kinds of costs that the CTR program has thus far incurred. On the other hand, data are scarce on the state of nuclear materials in those countries, so it is difficult to determine the scope and time-frame of such a program. At a minimum, however, such a program is likely to be incrementally implemented. Costs could be minimal if a quick-fix, low-technology, information-oriented approach is taken or they could be more substantial if a sophisticated, high-technology approach is taken that would incorporate cameras, encryption, remote monitoring, and other means. The same is true in the BW and CW areas; the scope of the undertaking in Russia greatly outweighs the combination of programs of relevant states. However, the management of multiple programs could present particular difficulties.

Certifications

In 1991, the legislation that created the Nunn-Lugar program stipulated that U.S. assistance in destroying nuclear and other weapons may not be provided to the Soviet Union, any of its republics, or successor entities unless the President certifies to the Congress that the proposed recipient is committed to:

- making a substantial investment of its resources for dismantling or destroying such weapons;
- forgo any military modernization that exceeds legitimate defense requirements or is designed to replace destroyed WMD;
- forgo the use of fissile materials and other components from destroyed nuclear weapons in new nuclear weapons;
- facilitate U.S. verification of weapons destruction that uses U.S. money;
- comply with all relevant arms control agreements; and
- observe internationally recognized human rights, including the protection of minorities.

Certifications, according to some Administration officials, allow the United States to hold the recipient states' "feet to the fire," providing a source of leverage. In the view of others, however, they pose unnecessary and even dangerous delays in implementing CTR programs. S. 2908 would have eliminated CTR certifications for CTR funds spent outside the former Soviet Union, but would have required reports to the relevant congressional committees on the adherence to arms control agreements and nonproliferation commitments of potential recipients.

Other Considerations

Congress may wish to consider the implications of providing U.S. assistance to countries that not democratically governed. Section 508 of the Foreign Operations bill (H.R. 2673) in the 108th Congress prohibited direct assistance "to the government of any country whose duly elected head of government is deposed by decree or military coup." Most of the six state sponsors of terrorism would fall in this category. In addition, Pakistan has been subject to such restrictions. P.L. 107-57, which exempted Pakistan from existing restrictions prohibiting foreign assistance to any country governed by a military that overthrew a democratically elected regime, requires the President to determine that foreign assistance "facilitates the transition to democratic rule in Pakistan" and "is important to United States efforts to respond to, deter, or prevent acts of international terrorism."[73] Pakistan's exemption was to run out by October 1, 2003, but this was extended through the end of FY2004 by language in the emergency supplemental bill, P.L. 108-106. The law raises two pertinent issues: will President Musharraf restore democracy to Pakistan by the end of September 2004 and if not, how would continued military leadership in Pakistan affect U.S. cooperative efforts, particularly if new military leadership emerges? In the absence of regime change, similar questions might be raised about efforts conducted with Cuba, Syria, and Libya, at least.

---

[73] See CRS Report RS20995, *India and Pakistan: Current U.S. Economic Sanctions.*

Appendix A.

Relevant treaty texts relating to obligations not to assist non-weapon states in acquiring nuclear, chemical, or biological weapons capabilities

Nuclear Nonproliferation Treaty, Article I:

> The NPT states in Article I that nuclear weapon states commit:
>
> not to transfer to any recipient whatsoever nuclear weapons or nuclear explosive devices or control over such weapons or devices, directly or indirectly; and not in any way to assist, encourage or induce any non-nuclear weapon state to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.

Chemical Weapons Convention, Article XX

The CWC extends the prohibition to all states, stating that

> Each State Party to this Convention undertakes never under any circumstances:
> (a) To develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone;
> (b) To use chemical weapons;
> (c) To engage in any military preparations to use chemical weapons;
> (d) To assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Convention.

The Biological and Toxin Weapons Convention, Article III

> Each State Party to this Convention undertakes not to transfer to any recipient whatsoever, directly or indirectly, and not in any way to assist, encourage, or induce any State, group of States, or international organizations to manufacture or otherwise acquire any of the agents, toxins, weapons, equipment, or means of delivery specified in article I of the Convention.