Cooperative Threat Reduction:
The view from Washington.

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When the Soviet Union collapsed, ending the Cold War, the world became a far less dangerous place. But not all the news was good, especially on the short term. Soviet strategic nuclear weapons had been stationed in three Soviet Republics other than Russia. Was the world suddenly to have three new nuclear powers with untested civilian and military nuclear control? And tactical nuclear weapons might have been deployed in several other former Soviet Republics. What was to become of them, or the chemical and biological weapons formerly under the central control of the Soviet Union?

The United States responded warily and slowly to the demise of the Soviet Union. Even so, the United States recognized that it was in its own best interests to help as much as possible to secure dangerous materials in the former Soviet Union and, in general, help in the destruction or control of excess weapons. To meet a variety of needs, the United States started an ad hoc combination of programs of assistance to the States of the former Soviet Union. These programs are lumped under the name of cooperative threat reduction (CTR), but bureaucratically they remain only loosely coordinated. (Note that "Cooperative Threat Reduction" in capital letters usually refers specifically to programs funded under the Nunn-Lugar legislation. In this paper, I use the term "cooperative threat reduction" generally. The highly enriched uranium blend-down agreement, for example, is clearly a form of cooperative threat reduction, but is not part of Nunn-Lugar.) This paper does not focus directly on the condition of or control of dangerous materials in Russia or the former Soviet Union. Instead, it surveys cooperative threat reduction from

a Washington perspective, examining some of the political, bureaucratic, and financial constraints.

Both Russia and the United States have accomplished much and have much to be proud of in securing materials, destroying dangerous materials, and generally reducing the threat of theft of weapons or materials by terrorists. And while the program continues to enjoy support from the US government, the support is neither strong nor deep. What are the problems? The difficulties of the CTR program range from minor to major. The question facing the future of CTR is not whether its problems are insurmountable, they are not, but whether there is the political will to overcome them.

The CTR program is extremely broad, ranging from help building safer, tamper-proof rail cars used to transport Russian nuclear warheads to efforts to redesign Russian nuclear research reactors so they no longer need highly enriched uranium (HEU). The main areas where the United States and Russia are working together to reduce Cold War dangers are listed in Table 1. The majority of these programs are related directly or indirectly to the destruction, security, or management of dangerous materials or weapons. The few efforts that are not materials related include destruction of bombers and ICBMs along with their silos, closure of nuclear testing tunnels, and alternative research for Russian nuclear scientists.

First and foremost of the cooperative programs is the safeguarding or destruction of assembled nuclear warheads. The United States has worked with the Russians to train security personnel and develop new security equipment. It has also provided the Russians with 123 kilometers of security fencing and other sensors for installation around nuclear weapons storage sites. The Russians have completed the first security upgrades at over 30 sites. The United States has funded secure railcars, designed specifically to transport nuclear warheads between storage sites and to dismantlement sites. The United States offers some assistance to Russia for nuclear warhead dismantlement but, because of the sensitive nature of the work, this support is necessarily limited. Once the material has been removed from warheads, however, the United States again helps with material disposition. The Mayak Fissile Material Storage Facility will safeguard nuclear material from over 10,000 nuclear warheads. The United States is helping pay for a Mixed-Oxide (MOX) fuel fabrication facility that would convert 34 tons of Russia plutonium into

useable nuclear fuel. (The US would also burn up, or otherwise dispose of, another 34 tons of plutonium.) In a separate program, the United States is buying low enriched uranium derived from the blend-down of 500 tons of weapon's grade HEU, which will be burned to produce electricity.

In addition to nuclear weapons and the materials recovered from them, the United States and Russia collaborate on reducing the amounts of weapon-usable fuel in nuclear reactors or otherwise securing the material. The Reduced Enrichment for Research and Test Reactors (RERTR) project is working on developing low enriched fuel, that is, less than 20% U-235, that can replace the HEU in current research reactors. Other programs aim to repatriate HEU from reactors the Russians have sold to foreign countries, and to close the BN-350 breeder reactor in Kazakhstan.

The United States and Russia also collaborate on destroying or securing chemical and biological weapons. These projects are not, in general, as far along as their nuclear materials counterparts, some being in the planning stages. But the United States has assisted Russia in improving perimeter security at former bio-weapons sites in Novosibirsk and Obolensk. Similarly, the chemical weapons cooperation has focused more on destruction of some chemical weapons facilities and securing others rather than the chemical weapons themselves.

The CTR program has had some notable missteps. The United States has spent over $200 million on construction of two rocket fuel recycling plants, in Votkinsk and Krasnoyarsk, that will probably never be used. $95 million was spent on the solid rocket motor burn facility at Votkinsk when construction stopped because local environmental permits were not forthcoming. The United States had already spent $106 million on a liquid rocket fuel reprocessing facility in Krasnoyarsk by the time the Russians informed the Americans that the fuel had already been turned over to the civilian space program. In both cases, some blame can be assigned to the US Department of Defense (DoD), but the Congress believes the Russians should have been more forthcoming about the needed permits and the disposition of the fuel. The United States understands that both it and Russia have both security interests and economic interests in the CTR programs. The United States also understands that it and Russia will weigh differently the relative importance of security and economy. But the US attitude is that this is not a commercial

deal, but helpful assistance between nations that share common interests. *Caveat emptor* does not apply. At the very best, the rocket fuel experience reflects a complete breakdown in communication. At worst, it is possible to believe that Russian authorities lacked any incentive to remind the Americans of problems as long as US money was flowing into the economy.

Many in the US Congress question the basic premise of CTR efforts. Why, they ask, should the United States pay for a problem that the Soviets/Russians created? In the worst possible case, whenever the United States helps with tasks that the Russians consider essential and would do anyway it is freeing up funds that the Russians can devote to strategic weapon improvements. To the extent this is true, it is not clear that CTR efforts, however efficient, even provide a net benefit to US security.

Access and transparency are continuing sources of friction between the United States and Russia. The United States wants to ensure that money and equipment go where they are supposed to go and are used properly. The Russians, on the other hand, are concerned about state security and secrecy, and resist intrusive auditing or on-site inspection. The most difficult case is security of nuclear weapons storage facilities. The Americans want to ensure, for example, that security fencing provided to keep intruders out is actually installed at the sites, not diverted to some other use, and are even concerned whether it is installed properly to provide maximum security. The Russians are adamant that even the locations of their nuclear storage sites remain secret and foreigners are not allowed to visit, much less inspect the sites. Similarly, American technicians are not allowed into all buildings at former biological weapons facilities, which raises serious questions for the Americans. If the Russians have ended biological weapons work, what is the source of their sensitivity?

One immediate challenge facing the CTR program is the unresolved issue of liability. Two programs, the Plutonium Disposition Program and the Nuclear Cities Initiative, are in limbo right now because the United States and Russia cannot reach agreement exempting US firms from legal damages resulting from some mishap during US-funded activities. The US wants these two programs covered by the rules that cover almost all other CTR programs that severely limit US liability. The agreements under

which these programs operate have lapsed, although existing work is continuing for a while under a short term extension.

Some Russians complain that, in general, the American's attitude is "It's our money, so we make the rules" and are unconcerned about Russian sensitivities. Some Americans feel that the Russians do not take seriously the dangers of material security and their attitude is "If the Americans are so worried, let them pay for it." If the spirit of cooperation breaks down, then the whole program will fail. Rose Gottemoeller has suggested that a useful American good-faith gesture would be to ignore the direction the money is flowing and offer reciprocal nuclear weapon site inspections to the Russians, thus restoring a symbolic equality between the parties. Just as importantly, reciprocity would drive home to the Americans exactly how intrusive their requested inspections might be, or seem to be, and might temper US demands. The Russians must accept responsibility for failures as well. Without going into detail, there is a fairly clear pattern that CTR programs with the Russian Navy run more smoothly that with other parts of the Russian government or military. The difference, the "independent variable," is which Russian bureaucracy the Americans are dealing with. This suggests that good relations are possible, but not without cooperation on the Russian side.

Any enterprise as large and complex as US-Russian CTR is bound to have problems. But none of the problems is insurmountable. In a situation like this, the question is whether there is the political will to keep pushing forward in spite of problems, or will the whole process come apart because each side feels it is shouldering an unfair share of the burden. From the Washington perspective, support remains but it should not be taken for granted. And the political and bureaucratic realities work against CTR programs. The basic weakness of CTR is that it lacks a constituency, either politically or bureaucratically.

Officially, the Bush Administration fully supports CTR. But this is a legacy program inherited by the Administration, not something of their creation. Moreover, the Bush Administration has demonstrated that it does not always look first to treaties or other cooperative approaches when approaching international problems. Within the Administration, responsibility for CTR programs is divided. Those involving nuclear materials and weapons are the responsibility of the Department of Energy. Other weapon

programs, for example, chemical weapon demilitarization or destruction of nuclear delivery systems fall under the purview of the Department of Defense. Some smaller programs, for example scientist training and border security, fall under the Department of State. Thus, there is no single bureaucratic entity that is responsible for CTR, no department whose fortune depends on its success.

In Congress, it is the committees that make the real decisions about all but the most politically visible budgets. The committee structure roughly reflects the Administration's department structure. Therefore, just as CTR programs are divided between departments, their Congressional authorization and appropriation fall under several different committees. It is notoriously difficult to get various committees of Congress to coordinate their actions. Again, there is no single champion, either individual or committee in Congress, that is responsible for the CTR effort. We have even lost one sponsor of *the* CTR, that is, the Nunn-Lugar legislation. Senator Nunn has left the Senate and he was, arguably, one of the most powerful Senators of recent times.

CTR also suffers from the lack of a natural political constituency in Congress. The members of both house of Congress are elected by geographical region, not by party list. Members pay careful attention to the economic interests of their constituents "back home." But CTR funds are spent mostly in Russia and Russians can't vote for the people in Washington who are allocating funds; CTR spending doesn't win votes. Americans are obsessive about government's "wasteful" spending, which often means money spent on someone else, but to waste money on Russians is politically a double blow. The defense industry makes billions of dollars from government contracts and the industry hires small armies of lobbyists to make certain that their concerns are heard in Congress. The CTR effort does not have a comparable powerful industrial interest supporting it.

The CTR programs survive in part because they are a good idea but also in part because the total amount of money is small compared to other defense programs and it remains, therefore, a good "deal" but it also remains under the political radar. It might actually be good that CTR does not get lots of attention. If the program is executed flawlessly, it will win its proponents few political rewards but bad publicity, such as another rocket fuel recycling debacle, is possible and may irreparably damage the program politically.

No easy solutions present themselves. Good management and good communication are essential. The Russians must share the sense of urgency that the Americans feel about loose nuclear weapons and other dangerous materials. European governments may have a role to play. Cost sharing is welcome as long as it does not complicate the already complicated program administration. Some European countries might offer to act as honest brokers between the United States and Russia. For example, there are probably retired Soviet military officers from Ukraine, Kazakhstan, or the Baltics who know as much as anyone can know about Russian nuclear storage sites. The Russians might not object on security grounds to their presence at nuclear weapons sites and they might act as agents for the United States. CTR is important not just for the security of Russia and the United States but for the entire world. Problems or not, we need to find a way to make it work and we must not relax, because its continued success is not guaranteed.

Table 1

Summary of US-Russian Cooperative Programs

- Strategic offensive arms destruction
- Nuclear weapons storage and transportation security
- Fissile materials storage security (Mayak)
- Chemical and biological weapons facility security and dismantlement
- Cooperative research efforts for nuclear and biological scientists
- Conversion of HEU reactors
- Repatriation of Russian HEU research reactor fuel
- Shutdown of Kazak BN-350 breeder reactor
- Warhead dismantlement
- Protection of civilian and military reactors
- Commercial burn-up of plutonium and HEU
- Export controls and border security