

Countering WMD Terrorism: A Multilayered Defense

[Memorandum, 18 March 2009]

One of the most critical national security challenges we face today is the protection of our homeland against the threat of WMD terrorism. The death and injury toll inflicted by a crude nuclear weapon or biological agent would be absolutely devastating, while a radiological “dirty bomb” or chemical attack would also inflict severe social, economic, and political damage upon the United States. As such, countering the threat of terrorist WMD attacks must remain the top national security priority. The following memorandum briefly outlines the most basic—but necessary—strategies to building an effective, layered defense against chemical, biological, radiological, or nuclear (CBRN) terrorist attacks on the American homeland.

I-IV = Reaffirming Commitment and Refocusing Capability

V-VIII = Preventing Terrorist Acquisition of Current WMDs

IX-X = Strengthening the Nuclear Nonproliferation Regime

XI-XIII = Improving Homeland and Border Security

Reaffirming Commitment and Refocusing Capability

The two most important factors determining the effectiveness of counterterrorism efforts are steadfast commitment and tailored capability. These two factors must be refocused and reaffirmed both domestically and in the international community.

- I. Commit all necessary resources to focused, prioritized counterterrorism (CT) efforts.** Take full advantage of America’s vast industrial, technological, and military capabilities to design a robust, multifaceted CT strategy. When appropriating funds, security interests should come as a first priority, even over the interests of private industries. Focus efforts on those nations that pose the most direct and probable threats. For instance, the invasion of Afghanistan was a prime example of a wise and disruptive CT undertaking, whereas the 2003 invasion of Iraq misallocated valuable CT resources. Clearly define the roles of various government organizations with national security responsibilities. Always keep in mind the broad political, economic, and social implications of any new policies being considered
- II. Build international unity of effort.** Undertake diplomatic efforts to convince other heads of state to publicly acknowledge both the universal danger of WMD terrorism and the urgency of close, long-term cooperation. Be receptive and sensitive to other states’ concerns and domestic priorities. Above all, emphasize that the global magnitude of this threat leaves little room for neutrality or isolationism. The exercise of subtle diplomacy can be useful in dealing with particularly ambitious or uncooperative regimes; when agreements cannot be made

under the public eye, focus instead on building an informal, personal understanding. Building an active global alliance against WMD terrorism requires diplomacy that is inclusive, receptive, and steadfast.

- III. Prioritize human infiltration of terrorist networks.** It must be a primary focus of the CIA to train and implement as many language-proficient agents with counterterrorist expertise as possible. The extent to which we are able to successfully infiltrate terrorist organizations on the ground will drastically influence our ability to collect information on their capabilities and intentions. Extensive training of agents can be potentially game-changing and thus should take precedence over more technology-reliant efforts. For example, while the NSA's satellite photography and wiretapping operations are important, they are not as essential to WMD counterterrorism as the fostering of language fluency and expertise within our intelligence agencies.
- IV. Conduct collaborative intelligence operations.** In all undertakings, share information and pool resources with foreign intelligence and law enforcement agencies. Allow the DoD and DHS to have direct access to all relative information gathered by the CIA, NSA, and other intelligence organizations. The Counterterrorism and Security Group, headed by one distinct commander, can act as the leading team in assessing intelligence and coordinating interagency efforts.

Preventing Terrorist Acquisition of Current WMDs

It is both feasible and effective to target the "supply side" of WMDs. Regulate the circulation and development of CBRN materials in order to keep them out of terrorist hands in the first place.

- V. Secure all loose nukes and fissile material worldwide, beginning with Russia.** As of today, Russia has failed to adequately secure many of its Cold War-era nuclear facilities. Given the vulnerable nature of its storage facilities, Russia represents the largest target for weapons acquisition or diversion by terrorists. Diplomatic efforts should emphasize to Russian leadership that active cooperation in securing nuclear storehouses will improve Russia's prestige and signal to the world that it is a major, responsible player in global affairs. Expand all activities of the Cooperative Threat Reduction initiatives and Nunn-Lugar security programs, which have proven to be effective in the past. These initiatives will require continued leadership, vigorous support, and minimal bureaucratic entanglements.
- VI. Work with China to affirm nuclear security in Pakistan.** The discovery of A.Q. Khan's massive nuclear black market in 2004, along with recent suggestions that he was not operating independently but rather with some level of state support, serves as strong evidence of Pakistan's dangerous nuclear instability. Because the Pakistani security situation is largely dependent on its relationship with India, the U.S. should invite China (a long-time nuclear power and ally of Pakistan) to be a chief mediator. With the U.S. and China mediating in non-publicized setting, both India and Pakistan should be pressured to decrease and secure their arsenals.
- VII. Eliminate the civilian availability of HEU and secure our own nuclear facilities.** Convert all research facilities from HEU to LEU; discontinue any facilities where this is impossible. Also increase the arming and training of guards to prevent terrorists from targeting our facilities as giant detonable radiological bombs. When constructing new plants or modifying old ones, allow only one vehicular access point with several checkpoints for identification.

VIII. Inspect and discontinue the global development of chemical or biological (CB) weapons. To guard against the threat of terrorist groups developing or acquiring CB weapons technology for offensive purposes, we must first realize that while there are a daunting amount of chemical and biological weapons agents in existence, only a few of these would actually be likely choices for terrorists. Thus, we should prioritize the R&D of new vaccines and defenses against these likely agents. Convince other nations, especially Russia, to make public all of their CB weapons-production facilities. Finally, pressure the UN to strengthen an IAEA-like inspection team for suspected biological and chemical facilities.

Strengthening the Nuclear Nonproliferation Regime

Because of the instabilities generated by organizational frictions within governments, as well as the unpredictability of certain authoritarian regimes, we should treat the emergence of new nuclear states as a destabilizing factor to nuclear security. Moreover, because NPT insubordinates and non-signatories can dodge IAEA inspections, they magnify the threat of terrorist acquisition of nuclear materials, technologies, or weapons. In order to pressure these states to abandon or dismantle their weapons programs, the U.S. should rely primarily on multilateral carrots and sticks.

IX. Offer valuable incentives to prevent further proliferation. Keeping with the spirit of the NPT, the U.S. and other states should work with non-nuclear weapons states to offer them affordable reactor fuel. We should also emphasize that compliance with the NPT will bring about improved diplomatic relations in the international community. This would help minimize the economic and prestige-related incentives for building uranium-enrichment or plutonium-reprocessing facilities. While it is true that offering substantial benefits to North Korea and other countries with histories of human rights violations could damage America's image, these damages would be offset by the improvements in security and diplomatic relations that would arise from that country giving up its weapons. Also, with the establishment of a more globally-harmonious status-quo, these former insubordinates will have more incentive to reform. If countries still wish to pursue proliferation-risky activities, they should first be required to demonstrate sound economic reasoning.

X. Make further proliferation an internationally enforced crime. Depending on the nature of the country targeted, economic and diplomatic incentives may prove insufficient to dissuade its leaders from pursuing weapons-capable nuclear facilities. Such may be the case with Iran. To address such instances, urge other nations and the UNSC to adopt enforceable laws and penalties against nuclear proliferation. The NPT succeeded in establishing an international norm, but it alone is not a strong enough institution to curb today's threats. The adoption of the Additional Protocol, which allows the IAEA to more intrusively inspect any suspected facility and conduct environmental tests, is a major step in the right direction. With continued support for and expansion of IAEA capabilities, the international community will be more capable of catching states who aim to produce "civilian" HEU, leave the NPT, then finalize their nukes. Economic sanctions can sometimes be an effective stick, but they lack the immediate punch that is oftentimes necessary in these cases. For this reason, in extreme cases we should make credible the threat of a multilateral use of force. This can be accomplished through the same kind of tough "behind closed doors" diplomacy that worked in Libya,

conveying our military/intelligence capabilities to destroy their facilities unless they comply with international norms.

Improving Homeland and Border Security

While many improvements have been made to homeland security since 9/11, there is still much work to be done. This is the final line of defense of the multilayered CT strategy, and it faces perhaps the most daunting challenges.

- XI. Conduct thorough risk assessments and realistic cost-benefit analyses.** The simple truth is that it is neither possible nor in our best interest to turn America's borders into an impregnable, indiscriminating wall. To maximize our resources, we must continually determine which holes in our defenses terrorists would likely aim to exploit. In addressing these weaknesses, we should avoid one-track solutions such as putting too much trust in technological innovations. For example, while next-generation radiation portal monitors hold strong promise to detect contraband fissile material, the decision to implement them on a wide scale should come only after extensive real-world testing and consideration of other options. These options include improving the training program for Border Patrol officers and investing in radiation detection at foreign ports. When conducting cost-benefit analyses for possible homeland security measures, we should also consider the degree to which implementation would deter terrorists from attempting a WMD attack in the first place.
- XII. Emphasize communication and coordination across the board.** Given the massive scope of this effort, it is extremely important that we build a thorough understanding between government organizations. Improve communications infrastructure to ensure effective coordination between National Guard, Coast Guard, Customs, and Border Patrol efforts. In extreme cases, command and control should allow for quick and flexible NORTHCOM support. Also offer economic incentives to the private sector so that they may consider more security-sensitive policies. Finally, ensure that local and state governments implement effective security measures that will support and not hinder federal efforts.
- XIII. Implement the following specific security measures for port, air, and land security.** For sea ports, which are currently the most likely way for terrorists to smuggle in WMD materials, research new space-based tracking technologies and train equipment operators to assign accurate threat levels to each shipment. For air travel, heighten risks to terrorists by stationing armed police at various airport checkpoints and installing automatic tracking transponders on aircraft. For land borders with Canada and Mexico, increase the frequency of checkpoints and continue to improve the training programs for Border Patrol officers.

Successful prevention of terrorist WMD attacks requires skilled, alliance-building diplomacy and a large-scale commitment of resources. Target CBRN materials at the source and revamp homeland security to develop a multilayered, supply-focused counterterrorism strategy.

I request this essay and my name to be published on the Lint Center for National Security Studies, Inc. website.