After the attacks of September 11, 2001, Al-Qaeda spokesman Abu Gheith wrote: “We have not reached parity with them [the US, its allies and Israel] in terms of Muslims allegedly killed, wounded, or exiled. We have the right to kill 4 million Americans - 2 million of them children - and to exile twice as many and wound and cripple hundreds of thousands.” The only way that Al-Qaeda could attain this objective would be to use nuclear weapons or a highly destructive and sophisticated biological agent.

The threat of terrorist use of nuclear weapons and other weapons of mass destruction (WMD), whether biological, chemical, or radiological, is a real one that represents a most serious threat to the US and other nations that are potential targets of subnational terrorist groups or networks. If such a terrorist group could gain access to a WMD weapon, it could use it or at least threaten to do so. While there is very little information about terrorists’ capabilities or intentions to obtain nuclear weapons, Osama bin Laden has specifically referred to the acquisition of nuclear weapons by his terrorist network al-Qaeda as a “religious duty.” Documents were found in the al-Qaeda caves in Afghanistan that even included a schematic diagram of a nuclear weapon.

Megaterrorism
Garwin (2002) most fears what he calls “megaterrorism,” involving thousands of casualties, by means of biological warfare agents, smallpox, anthrax, etc. or nuclear weapons, possibly using a nuclear weapon stolen in Russia, or from the assembly in the United States of an improvised nuclear device based on high-enriched uranium. It is customary to include as WMD nuclear, biological, chemical, and radiological weapons, but there are important differences among these weapons. In fact, it is misleading or even mistaken to lump together all of these weapons as one category of “Weapons of Mass Destruction.” Nuclear weapons are in a class all to themselves in view of their tremendous destructive potential.

Trends in terrorist incidents indicate a tendency toward mass-casualty attacks for which WMD are well suited. There may even be rivalry between terrorist groups to have the largest impact and the greatest publicity. And recent revelations that Abdul Qadeer Khan, the “father” of the Pakistan nuclear weapon, provided nuclear weapons technology to several nations suggests the emergence of a type of nuclear weapons “bazaar” that will sell components, technology, etc. to the highest bidder, whether another nation such as Libya, North Korea, or Iran or to a well-financed terrorist group.

Evaluating the Threat
The world’s terrorist groups or networks have a wide range of motivations and ideologies, and their strategies and tactics likewise differ. There is no such thing as a “stereotypical terrorist.” To date, only one terrorist group has used WMD: the Aum Shinrikyo terrorist group release of sarin nerve gas on the Tokyo subway on March 20, 1995. But this attack represented the crossing of a threshold, demonstrating that certain types of WMD are within the reach of some terrorist groups.

To a degree, WMDs are “self protecting.” They are difficult to acquire, to use, and to care for properly. This has the effect of keeping such weapons out of the reach of various national and sub-national groups, including terrorists. A well-financed terrorist group, however, could have hire experts, as was the case with Aum Shinrikyo. Ricin is easy to make, and nuclear weapons are not. Nevertheless, weapons are like many other technologies: demand is rising, and marginal costs are falling. Thus, it is only a matter of time before WMDs, including nuclear or radiological weapons, are no longer self-protecting.
The likelihood of terrorist groups acquiring WMDs is probably very low in the short run but high in the long run. There is no way to demonstrate either that terrorists will or will not use such weapons, but even the very low probability of a remote possibility is more than offset by the extraordinarily high loss it would entail.

Furthermore, it would be a serious mistake to underestimate terrorists' abilities to acquire new technologies or to adapt or combine existing ones, as in the suicide hijackings of September 11, 2001. Such nightmare scenarios can make even thinking about the problem and its remedies extraordinarily difficult. Instead of waiting for a possibly devastating attack to occur and then responding, we should be actively seeking protective measures now.

**Countering the Threat**

1. *Global response.* International terrorism is a global problem must be dealt with on that scale, using international organizations and international cooperation. It cannot be addressed by unilateral action or with little support from other states.
2. *Demand and supply.* Terrorists’ demand for WMDs may increase regardless of defense policy, but the supply, particularly of fissile material, can be constrained. Russian stockpiles of tactical nuclear weapons should be better safeguarded, and their chemical weapons and biological weapons destroyed, through an expansion of the Nunn-Lugar Cooperative Threat Reduction program. However, such constraints may not work perfectly, and terrorists may already have sufficient fissile material to create a nuclear weapon or “dirty bomb.”
3. *Nonproliferation.* The fewer states that possess nuclear weapons, the fewer opportunities terrorists have to purchase or obtain fissile material or technology. The last few years, however, have seen North Korea building a small nuclear stockpile and Iran threatening to do the same. Presently, the NPT effectively allows countries to develop nuclear weapons and simply to withdraw from the treaty before deploying them. The EU, Russia, China and the US should work together during this year's Review conference to develop a more stringent regime. [Note: This article was written before the start of the 2005 Review conference. - Ed.]

Because in the long run supply-side measures may be imperfect, we should therefore seek to reduce the terrorist demand for nuclear weapons. A new form of deterrence must be developed, with a global system that would be used against any terrorist group using WMD.

**A New Form of Deterrence**

Some (e.g. Konishi, 2002) have argued that the Bush administration's preemptive/preventive war strategy may be the best way to deter terrorists, because it defines “a strategy that involves overwhelming military force aimed both at terrorists and states that harbor terrorists.” However, overwhelming US conventional power itself may compel terrorists “to use apocalyptic weapons in a struggle against the United States.”

There are clearly serious challenges to adapting existing deterrence models, which were originally designed for state-to-state interaction, to non-state actors, such as terrorist groups and networks. Thus, traditional concepts of deterrence will have to be reshaped to deal with the issue of how terrorist groups could possibly be deterred. It is sometimes argued that suicide bombers cannot be deterred because they are already sacrificing their lives for their cause. This argument is flawed, however, as it is not the suicide bombers that must be deterred but rather their controllers, who make the decisions.
Terrorists do have something to lose and could thus potentially be deterred. The terrorists do, in particular, have a stake in overall group survival. In general, the possibility of deterring terrorism must be systematically analyzed, analogous to the process at the beginning of the Cold War, before the doctrine of mutual assured destruction was developed. The challenge to strategic analysts now is to develop a concept of deterrence that would be effective against terrorists, taking into account their particular motivations and strategies.

**Conclusion**

We must establish clear priorities for US counter-terrorism policies. The “Global War on Terror,” in my view, is empty rhetoric. It fails to recognize terror as a tactic that may be employed by different types of groups, including insurgents, to meet their political ends.

A coherent strategy should include serious improvements in intelligence systems that have failed us repeatedly: better organization, upgraded capacities, better use of the private sector (including universities), and holding intelligence services and individuals responsible for their failures. The recent bill reorganizing the intelligence system in the US has not accomplished these changes.

Some of the initiatives that have been undertaken at the local level, such as the Terrorism Early Warning (TEW) unit that was initially established in Los Angeles for information exchange and mutual support among first responders, should be expanded to the regional, state, national and international levels. Another initiative would be to provide more resources for diplomacy that has been starved for funds and personnel. A combination of strategic thinking, control of demand and supply, and international cooperation will provide the most effective (and most cost-effective) measures against terrorist use of WMD.

**Notes**


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