

The Threat of Nuclear Terrorism

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Risk = Intent x Capabilities x Consequences

By the standard set by this fundamental risk assessment equation, nuclear terrorism is a real and urgent threat. Given the potentially catastrophic consequences, even a small probability of terrorists getting and detonating a nuclear bomb is enough to justify urgent action to reduce the risk. It is plausible that a technically-sophisticated group could make, deliver, and detonate a crude nuclear bomb if it could get sufficient fissile material.

Only two groups are known to have sought a yield-producing nuclear bomb. In the 1990s, the Japanese cult group Aum Shinryko unsuccessfully sought to acquire and use nuclear weapons to trigger the collapse of world order. Al-Qaeda and its associated Islamist extremist groups have sought nuclear weapons for almost two decades, without making observable progress.

However, recent writings from top al-Qaeda leadership (2003 and 2008) offer a meticulously researched religious justification (fatwa) for the use of weapons of mass destruction (WMD) that include mass slaughter of civilians. It is clear that the group desires high-end WMD, either biological weapons or nuclear weapons capable of killing ten million Americans. Given this mindset, a radiological dispersal device, or so-called “dirty bomb,” appears to be of little interest to a group that is bent on changing history.

In assessing this fatwa’s possible relevance in future attacks, there are chilling similarities between al-Qaeda chief Osama bin Laden’s “fatwa” in 1998 that served as a harbinger of the 9/11 attack in 2001, and al-Qaeda deputy chief Ayman al-Zawahiri’s WMD treatise in 1998. Indeed, it is possible that if the timing of this planning cycle holds true, al-Qaeda is in the middle of a window for another large-scale attack on the United States. If this be the case, the ample religious justification that has been provided requires no more warnings, or explanations, in advance of a future attack.

Taking into account the unshakable nature of al-Qaeda’s nuclear intent, denying them nuclear capability is crucial. Making a crude nuclear bomb would not be easy, but is potentially within the capabilities of a technically sophisticated terrorist group, as numerous government studies have confirmed. Detonating a stolen nuclear weapon would likely be difficult for terrorists to accomplish, if the weapon were equipped with modern technical safeguards (such as the electronic locks known as Permissive Action Links, or PALs). Terrorists could, however, cut open a stolen nuclear weapon and make use of its nuclear material for a bomb of their own.

Al-Qaeda’s determined, long-term approach also places great importance on ensuring that nuclear weapons and weapons-usable materials are secured to a “Fort Knox” standard to ensure

terrorists cannot exploit the potential existence of malicious insiders in nuclear establishments. The nuclear material for a bomb is small and difficult to detect, making it a major challenge to stop nuclear smuggling, or to recover nuclear material after it has been stolen. Hence, a primary focus in reducing the risk must be to keep nuclear material and nuclear weapons from being stolen by continually improving their security, as agreed at the Nuclear Security Summit in Washington in April 2010.

Given the grave consequences of a single bomb that is detonated in any city in the world, urgent global action is required to reduce the risks. Risk is driven by the rise of terrorists who seek to inflict unlimited damage, many of whom have sought justification for their plans in radical interpretation of Islam; by the spread of information about the decades-old technology of nuclear weapons; by the increased availability of weapons-usable nuclear materials; and by globalization, which makes it easier to move people, technologies, and materials across the world.

Cooperation between Russia and the United States, the two countries with the largest nuclear stockpiles and the most extensive experience in cooperation to improve nuclear security and interdict nuclear smuggling, is particularly important in reducing the danger nuclear terrorism could pose to the security of both countries and the world. International intelligence and law enforcement cooperation targeted on countering nuclear smuggling and identifying and stopping terrorist nuclear plots are also important steps to reduce the danger of nuclear terrorism.¹

NATURE OF TERRORIST WMD INTENT

The threat of nuclear terrorism is broader than al-Qaeda, and militant Islam. In the future, other groups will no doubt manifest WMD intent. For today, al-Qaeda serves the best case study for understanding the threat posed by nuclear terrorism. And this threat is here with us now.

In 2008, al-Qaeda deputy chief al-Zawahiri meticulously laid out the group's WMD thinking in his book, "Exoneration." The al-Qaeda leadership's justification for the use of WMD on religious grounds cannot be dismissed as being a theological exercise. In all probability, the leadership is explaining why the use of WMD is necessary because they are actively planning to use these weapons; if 9/11 was a declaration of war against America, a Hiroshima bomb is a way to win the war. Nuclear and "big bio" weapons are desirable because they can produce global economic disruption, cause mass casualties, and perhaps most importantly, create widespread doubts concerning world order and governance.

In this light, there are chilling similarities between the warning and planning cycle associated with the 9/11 attack, and rituals associated with al-Qaeda's WMD statements. Osama bin Laden issued a religious ruling (fatwa) in 1998 that served as a harbinger of the 9/11 attack. The al-Qaeda's leader's declaration of war against America did not only fulfill a religious obligation; it launched secret planning for an unprecedented attack that took place three years later. The timing of al-Zawahiri's fatwa in 2008—which meticulously justifies an unprecedented attack on an almost unimaginable scale of destruction—may also have hatched planning for an attack that is intended to fulfill al-Zawahiri's promises to raise the level of violence.

But al-Qaeda is bound by obligations and rituals that are intertwined with attack planning. Religious pre-justification and serial warnings are required for introducing new rules into the battle. To that end, on May 21, 2003, senior Saudi cleric Nasr al-Fahd offered three arguments for using WMD in a fatwa that was requested by the al-Qaeda leadership.

- 1. One kills in a good manner only when one can. If those engaged in jihad cannot do so, for example when they are forced to bomb, destroy, burn or flood, it is permissible.*
- 2. One avoids killing women and children only when one can distinguish them. If one cannot do so, as when infidels make a night attack or*

invade, they may be killed as collateral to the fighters.

- 3. Similarly, killing a Muslim is forbidden and not permitted; but if those engaged in jihad are forced to kill him because they cannot repel the infidels or fight them otherwise, it is permitted, as when the Muslim is being used as a living shield.*

In 2008, Zawahiri resurrected Nasr al-Fahd's fatwa, and raised key Quranic themes to justify the use of WMD to include: the legality of killing women, children, and the elderly; the use of Muslim shields; the inevitability of environmental destruction; notions of retaliatory use and deterrence; attacking in the night and unintentionally harming noncombatants; among other such issues. Zawahiri explained why he considers the United States to be the "main enemy of all Muslims," and a "single juridical entity" under Islam. This judgment means all Americans are valid targets, whether they are men, women, or children. Indeed, not only are the same scholars, clerics and quotations recounted in "Exoneration," but many of the same examples are used nearly verbatim.

Al-Qaeda's justification of WMD under Islam has been met with a fairly muted response. Most Islamic scholars and clerics have not spoken specifically on WMD, and those who have, tend to place WMD in the broader context of Quranic rulings related to waging "just war," an approach that unfortunately does not address the unique moral aspects of using WMD.²

PATHWAYS TO CAPABILITY

Intent itself, without acquisition of capability, is an empty threat. How might terrorists get the capability to create a nuclear blast? They might get an assembled nuclear weapon, and attempt to set it off, or they might get weapons-usable nuclear material and attempt to make it into a crude nuclear bomb. In either case, they might try to steal the nuclear weapon or material; they might try to buy it on the black market from others who had already stolen it; or they might try to get a state to sell or give it to them.

The group has repeatedly attempted to purchase stolen nuclear material or nuclear weapons, and has repeatedly attempted to recruit nuclear experts. Al-Qaeda reportedly conducted tests of conventional explosives for its nuclear program in the desert in Afghanistan. The group's nuclear ambitions continued after its dispersal following the fall of the Taliban regime in Afghanistan.

While there are significant gaps in knowledge, al-Qaeda appears to have been frustrated thus far in acquiring a nuclear capability; it is unclear whether the group's nuclear-related planning has progressed to a substantial degree to acquiring capability. Furthermore, pressure from a broad range of counter-terrorist actions probably has reduced the group's ability to manage large, complex projects, but has not eliminated the danger.

Purchase or Theft. After the Cold War ended, the former Soviet Union was an attractive place to shop for nuclear components. In fact, there are reports that Ayman al-Zawahiri visited Russia in the mid-1990s seeking to purchase WMD. However, al-Zawahiri's announcement in 2001 that al-Qaeda had obtained nuclear devices in the former Soviet Union does not ring true. If the terrorist organization had purchased such weapons, why announce it to the world? There is no evidence that any of the many press reports suggesting that terrorists have managed to buy or steal stolen nuclear weapons is true.

Each nation that possesses nuclear weapons maintains substantial security for them and a rigorous accounting of how many they possess. Theft is the least likely possibility, given the level of security at facilities and a multi-layer system of preventing unauthorized detonation. However, measures should be considered to eliminate any risks, particularly in unstable areas of the world, that terrorists could steal a nuclear bomb and then take it to a safe facility to defeat whatever measures it may have for preventing unauthorized detonation.

Construct. Counting assembled nuclear weapons is far easier than accounting for nucle-

ar material in bulk form. Some weapons-usable nuclear material (particularly in the civilian sector) does not have the same level of security that nuclear weapons have. As a result, terrorists' best chance of achieving a WMD capability may be a long-term effort to construct an improvised nuclear device (IND) from weapons-usable material they manage to steal or purchase on the nuclear black market.

Al-Qaeda's experience on the nuclear black market has taught its planners that their best chance at mounting some sort of nuclear or radiological attack is to build an IND constructed of illegally-purchased, weapons-usable material. The direct pathway of finding a "loose nuke" or "suitcase nuke" is riddled with scam artists and intelligence services dangling their wares to terrorists. So while building a bomb is surely not the preferred course of action, it might be the only realistic pathway for sub-state actors who cannot develop the infrastructure necessary to enrich fissile material.

There are two basic types of INDs terrorists might make. A "gun-type" bomb made from highly-enriched uranium (HEU), in particular, is basically a matter of slamming two pieces of HEU together at high speed. An "implosion-type" bomb—in which precisely arranged explosives crush nuclear material to a much higher density, setting off the chain reaction—would be substantially more difficult for terrorists to accomplish, but is still plausible, particularly if they received knowledgeable help (as they have been actively attempting to do).³ A crude implosion-type design does not have to be as complex and sophisticated as the Nagasaki bomb.

Depending on the nuclear materials they acquired, terrorists would need to:

- Develop a design for their bomb, including detailed drawings of the various parts they would need to make and how they would fit together
- Possibly do at least some modest chemical processing of the nuclear material, to put

it in the form they wanted (for example, converting oxides to metal)

- Cast the nuclear material into the desired shapes (a somewhat difficult task, given the unusual properties of uranium and the still more problematic properties of plutonium, which has several different crystalline forms)
- Machine the cast pieces, for example with a lathe, to get them to fit together as desired.
- Make and shape the explosives to be used in the bomb
- Provide the other components, such as the detonator or other device to be used to set off the explosives
- Put all of these parts together

Carrying out these tasks would require people with a number of specialized skills. It is not just a question of *designing* a workable nuclear bomb, but of actually building the complex object based on that design, with its various parts. A capable machinist might play as large a role as a nuclear scientist. Part of the debate over whether it is plausible that terrorists could make a bomb is a debate over the plausibility of a terrorist group acquiring all of these specialized abilities, and convincing these specialists to devote themselves to the bomb project over an extended period of time.⁴

Building an IND would be a major challenge for terrorists. It would require terrorists to successfully carry out a complex series of actions to obtain a bomb and plan an operation to use it in complete secrecy. Even if such an operation passed undetected until the bomb was ready, until the device was detonated a terrorist would never know for certain whether his device was viable and would result in a substantial nuclear yield. But a terrorist group is able to take shortcuts in constructing an improvised nuclear device—or crude nuclear bomb—that has a low yield, one that may be unpredictable, inefficient and unsafe from a state weapons perspective.

Terrorists could smuggle an assembled bomb in to the target country, whole or in pieces, that could be readily assembled; or they could bring the nuclear material in and manufacture their weapon in the target state—perhaps with the front of a legitimate business such as a machine shop or foundry to hide their activities. The new threat we face comes from a terrorist group that is able to produce such a bomb and successfully deliver it to its target, whether that be in a truck or aircraft, to be detonated by suicide bombers.

Sabotage. Terrorists could attack a nuclear facility in the hope of causing a large release of radioactivity. There is evidence that al-Qaeda's leadership considered such a possibility prior to September 11, 2001, when operatives reportedly conducted some light casing of U.S. nuclear reactor facilities.⁵ However, given the enhanced security and reinforced defenses at U.S. nuclear sites, al-Qaeda presumably concluded that it is too difficult to either crash a plane into a nuclear facility or to use a team to penetrate a nuclear facility to gain access to nuclear weapons or materials. This optimistic appraisal may not apply to all facilities in all countries, including the United States and Russia. Terrorists will certainly be searching for a "weakest link" facility in an otherwise well-defended nuclear establishment.

One important lesson of the Chernobyl accident is that what can happen as a result of an accident can also happen as a result of a premeditated action. Indeed, today's high levels of nuclear safety are dependent on the high reliability of components such as cooling systems; if these are intentionally destroyed, the probability of a large release would increase greatly. Terrorists will most likely try to damage a reactor's support and water supply systems as well as its control and protection system to cause a heat explosion of the reactor with subsequent demolition of the reactor and the building in which it is located. Even if terrorists fail to cause a wide-scale dispersal of radioactive material, their sabotage efforts may still shut down a reactor in what would cause significant eco-

nomic and socio-political damage. Overfilled spent fuel pools may also be potential sabotage targets; in some cases, if terrorists managed to drain the cooling water, a zirconium fire and large-scale dispersal of radioactivity could potentially result.

Other potential sabotage targets include research reactors, nuclear waste reprocessing plants, or spent nuclear fuel or high-level waste transportation. Another scenario of a radiological terrorism act could involve seizure of a vehicle or a vessel that is transporting radioactive materials and subsequent threat to blow it up.⁶

Radiological dispersal devices or "dirty bombs" spread radioactive material over an area—they cannot destroy the heart of a major city in a flash as a nuclear explosive can. Given the public fear of radioactivity, however, contaminating many blocks of a major city with radioactive material could create panic and substantial evacuation, disruption, and clean-up costs.

Detonation of a radiological weapon by terrorists will not cause immediate human deaths as a nuclear explosion would. The deaths will occur well after and will not be simultaneous. The impact of radiation cannot be sensed by humans. Hence, the terrorists might choose to announce that they had dispersed radiation over an area, or they might wait for the attack to be detected. The quantity of radioactive material needed to contaminate a city square is not substantial. Radioactive sources that would be very dangerous if dispersed are widely used in hospitals, industry, and agriculture. Control and accounting of these sources remains insufficient in practically all countries. Therefore getting radioactive material for a "dirty bomb" would be far easier than getting the HEU or plutonium needed for an actual nuclear bomb—and making the dirty bomb itself would also be a far smaller technical challenge.⁷

MANAGING RISK

There are unique considerations associated with managing the risks of nuclear terrorism.

These special challenges must feature prominently in any effective plan of action to combat the threat.

The catastrophe that has never happened

There is a profound tendency to dismiss the likelihood of a threat that has never happened; this is all the more likely when the probability of an event is extremely low. Unfortunately, there are characteristics of nuclear terrorism that reinforce the belief among the legions of skeptics that the threat has been hyped—or, is not real.

It is not clear whether there is an active al-Qaeda nuclear plot at present, but one thing is clear: such a plot would be hard to find, even if we are actively looking for it. The footprint would be tiny. Al-Qaeda nuclear planning would involve the special tradecraft used in the embassy bombings in Nairobi and Dar es Salaam in 1998, the suicide attack on the U.S.S. Cole in October 2000, and the September 11, 2001 attacks, specifically in terms of the high priority and extensive precautions that were taken to ensure compartmentalization and secrecy. As such, the signatures of an attack would not be the same as the indicators of a tactically-inspired Times Square bombing, or a shoe bomber trying to take down an airplane.

There is a stronger possibility of a “blind spot” in counterterrorist defenses for an unprecedented event than is the case with attacks featuring known terrorist *modus operandi*. Unlike the more predictable pathways that a state follows in developing a nuclear program, a terrorist group could carry out most tasks in any order, and at any time; this non-linear approach enables them to repeat steps as necessary, as long as central planning is not compromised.

Probability of interdiction of a nuclear plot decreases over time

The odds of interdicting a nuclear plot diminish over time from inception of the plot to the attack. Chances of detecting the smuggling of nuclear material in transit are low.

However, it should be recognized that dynamic interdiction opportunities may occur and must be recognized as such. For instance, an operative might volunteer, or be detained, and offer details about the plot. A small amount of nuclear material from a larger amount being smuggled into the target country might be seized. Multiple layers of defense provided by radiation detectors, customs and border inspections, intelligence and law enforcement efforts, and other initiatives might produce potential tip-offs of a terrorist nuclear plot-in-progress—provided there is a sense of awareness and urgency to exploit any opportunity, however small, to identify and neutralize a plan-in-progress.

No such thing as perfect nuclear security—nuclear black market

Theft or black-market purchase of nuclear material dominates the overall risk of nuclear terrorism—which is why improving nuclear security has been a central element of the response so far. Terrorists are seeking nuclear materials more actively than they have in decades past, and these materials continue to exist in hundreds of buildings in dozens of countries with widely varying levels of security and quality of accounting.

Assembled nuclear weapons exist in the arsenals of nine states; some U.S. nuclear weapons are stored in several additional states in Europe. HEU and plutonium outside of nuclear weapons exist in a wide variety of forms and circumstances. Some 98-99% of the world’s HEU is in military stockpiles, where in most cases substantial levels of security are in place. The civilian HEU, often at research reactors—sometimes on university campuses—often has only minimal security measures in place. Roughly half of the world’s plutonium separated from spent fuel is in military stockpiles (or former military stockpiles now declared excess to military needs), while the rest is in civilian stocks. As with HEU, security measures are generally higher in the military sphere, though large plutonium-handling facilities in the civilian sector often also have substantial security measures in

place. Total world stockpiles of highly-enriched uranium and plutonium separated from spent fuel amount to nearly 2,000 metric tons. Such weapons-usable nuclear materials exist in hundreds of buildings in over 30 countries, under security conditions that range from excellent to appalling.⁸

The International Atomic Energy Agency (IAEA) has documented 20 cases of theft or loss of HEU or plutonium confirmed by the states concerned, and additional cases are known to have occurred.⁹ All but one of the known thefts of HEU or plutonium appear to have involved theft by insiders from facilities where material was being handled in bulk, which makes it easier for a thief to steal material without detection. What is not known is how many cases may have gone undetected, or how much stolen material may still be outside of state control. Theft of weapons-usable nuclear material, in short, is not a hypothetical concern but an ongoing reality.

Reported seizures of materials have been largely serendipitous. Facilities from which the materials originated did not report them as being missing. Not all materials have been recovered. Typically, potential buyers have not been identified. There have been incidents that have not been reported publicly, and others which are unknown. The existence of a nuclear black market provides empirical evidence that inaccuracies and discrepancies in inventory procedures continue to result in nuclear materials in bulk form disappearing without notice from their facilities of origin.

Pakistan's volatile mix of extremism, instability, and a growing nuclear program

No state is immune to a breakdown in security that results in an elevated risk of nuclear terrorism. Every nuclear establishment has malicious insiders at one time or another who might be in position to exploit lapses in security and inventory procedures. All potential leads to material in any country in the world must be treated with utmost seriousness.

Pakistan faces challenges most states do not in preventing circumstances that could provide terrorists with access to nuclear weapons-related capabilities. Fortunately, the Pakistani military is extremely professional and takes its responsibility to safeguard the nuclear establishment with utmost seriousness. However, three trends exert potential pressure on the Pakistan military's capacity to preempt any nuclear lapses. First, growing extremism in Pakistan increases the odds of insiders in the nuclear establishment collaborating with outsiders in order to gain access to weapons, materials and/or facilities. Second, the rapid expansion of Pakistan's nuclear weapons program and a shift to smaller, more mobile weapons will invariably introduce new vulnerabilities into the security system. And finally, growing instability within the country could result in a 'loose nuke' scenario, a takeover of a facility by rogue agents or extremists, or in the worst case, a coup and Taliban control over the nuclear arsenal.

The insider problems in Pakistan are a matter of record, i.e., the A.Q. Khan and Umma-Tameer-E-Nau (UTN)¹⁰ nuclear supplier networks. Prospects to recruit insiders have been recognized by Ayman al-Zawahiri, who has implicitly called on Pakistani insiders to collaborate with al-Qaeda, lest the U.S. intervene to seize these weapons in a crisis. Such conspiracy thinking plays to the prevailing sentiments in the country and may well inspire an insider to assist terrorists. UTN CEO Bashiruddin Mahmud has also made a public call on Pakistan to expand its weapons program as a deterrent, and as a hedge against U.S. intervention.¹¹

North Korean "A. Q. Kim" nuclear supplier network selling capability to terrorists

The worst nightmare is that North Korea decides to sell a nuclear weapon to terrorists, or the capabilities to make a bomb. The discovery of Syria's al-Khibar reactor, which was built with North Korean assistance, suggests Pyongyang may not possess long assumed, self-imposed constraints on transferring nuclear weapons technologies to third parties. Although there

have been no reported ties between North Korean officials and Islamist terrorists (as far as is known), the al-Khobar precedent raises fresh questions concerning North Korea's nuclear behavior, specifically whether the regime or elements of the regime (the hypothetical A. Q. Kim network?) would wittingly or unwittingly assist a sub-state actor in acquiring a nuclear capability.¹²

“WMD for hire” rogue supplier and other enabling networks

There is a wide variety of nongovernmental organizations that could serve as potential witting or unwitting enablers of a terrorist nuclear plot. These networks constitute an enabling element in acquiring nuclear capability. In this connection, UTN and A. Q. Khan associates remain at large. They maintain access to sensitive documents, technologies and industries. UTN members have not renounced their extremist views or connections. Past precedent suggests A. Q. Khan and UTN are probably not the first and last “WMD for hire” global supplier networks. We have been fortunate in that, thus far, rogue nuclear suppliers have not been linked to providing substantial nuclear capabilities to terrorist groups.

The leaders of organized crime families probably understand the consequences of trafficking and smuggling in nuclear technologies and materials. The question is whether this awareness extends down their organization—and how much control they have over it. Like nuclear supplier networks operating for states, organized crime has rogues willing to engage in nuclear trafficking/smuggling. For the genuine article, trusted venues will no doubt be used that are not commonly used by networks engaged in smuggling scam materials.

Availability of nuclear-related information on the internet

Sensitive nuclear weapons-related information is widely accessible. If a terrorist group accesses information that is readily available

from open sources, they might find usable information on the main elements required to construct a simple, yet effective crude device.

LONG-TERM RISKS

Nuclear terrorism must not be viewed only through the prism of Islamic extremism. The threat is broader than al-Qaeda, and it is here to stay. Global trends will influence the types and numbers of states and sub-state actors that develop an interest in nuclear weapons. The reasoning of various actors for pursuing WMD may find a basis in such factors as economic and social trends; the implications of globalization; and regional conflicts, among others. Myriad factors will either increase or decrease the risks posed by nuclear terrorism; some trends will lower the risks, but other trends will raise risks. Three nuclear-specific factors are particularly important in terms of their potential impact on the availability of nuclear-related capabilities.

Nuclear renaissance in the 21st century

Nuclear terrorists could seek material from the nuclear fuel cycle to use in a bomb. As energy demands drive more countries to develop nuclear power, this global expansion must be carefully managed to minimize potential proliferation risks associated with the nuclear fuel cycle, security, transportation and waste disposal of nuclear materials that might become accessible to terrorists.

There are 30 states that have reactors capable of producing nuclear materials, and some of these states are potentially unstable. More than 100 states and hundreds of private laboratories store radioactive materials, including weapons-grade materials. Many do meet the highest security standards.

Erosion of non-proliferation regime

It will be difficult to systematically lower the risks of nuclear terrorism as long as the number of nuclear weapons states and arsenals continues to grow. The treaty on the Non-Proliferation of Nuclear Weapons has been undermined since

the 1990s by the acquisition of nuclear weapons by India, Pakistan, and North Korea. The failure to agree on the Comprehensive Nuclear Test-Ban Treaty and the Anti-Ballistic Missile Treaty holds the potential to slow the expansion of nuclear arsenals in China, India, and Pakistan. There is also some risk that Japan, Taiwan and/or South Korea might decide to join the nuclear club. Japan would be first to be able to produce nuclear weapons of this trio, given its existing nuclear capabilities.¹³

Iran

IAEA inspections have exposed serious violations of obligations that Iran must have been fulfilling as a NPT signatory. There is circumstantial evidence that Teheran has been secretly acquiring technologies and materials important for production of nuclear weapons on the black market. This and other evidence, along with behavior of the Iranian leadership, give ground to believe that Iran is aspiring to eventually become a full-fledged nuclear power. In the event Iran develops nuclear weapons, there will be an elevated risk of nuclear terrorism posed by potential proliferation of materials and capabilities, most notably from potential insiders in the nuclear establishment who may be willing to work with terrorist groups. Iran's surrogates, Hezbollah and Hamas, could become future candidates for acquiring WMD capabilities.

References

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