



Issue: Preventing Nuclear Terrorism

Forum: General Assembly 1

Position: President of the General Assembly

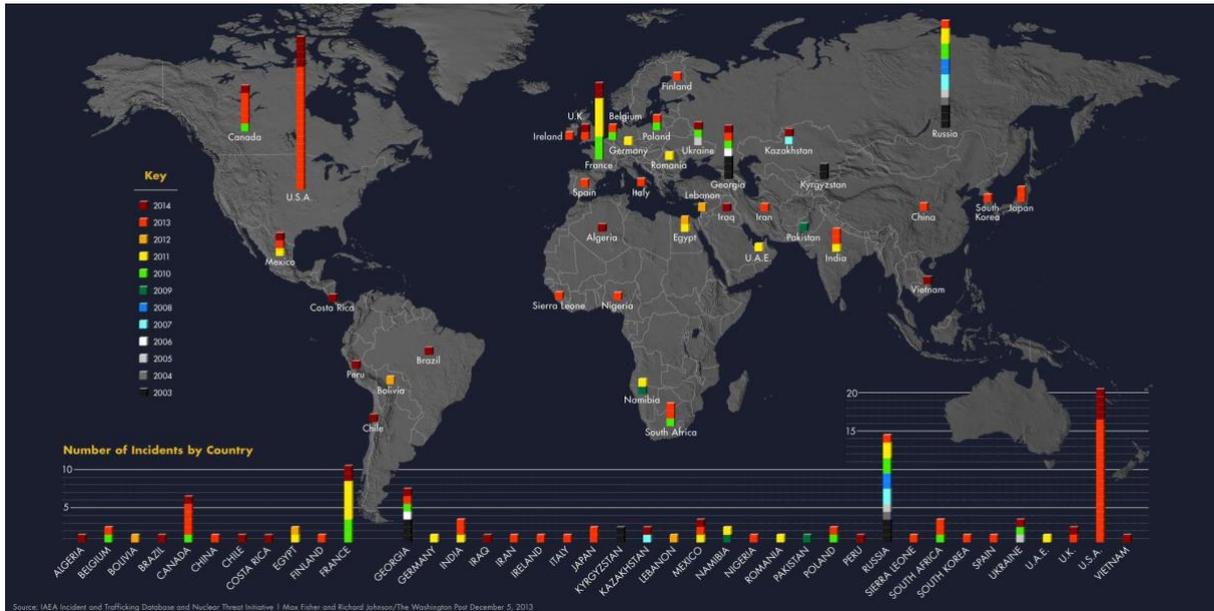
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Introduction

Security strategies, for the greatest part of recorded history, have been defined by sovereign boundaries and friend was distinguished from foe through ethnic, religious or other groupings. This approach to security dissolved in the 20th Century with the rise of airplanes, submarines, and particularly, ballistic missiles. Globalization has further lead to the dissolution of borders, facilitating the rise of international terrorism, shifting the reality of our approaches to national and international security.

Barack Obama, former U.S. president, issued the following statement in 2009: “nuclear terrorism is the most immediate and extreme threat to global security”. Furthermore, the U.S. Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism declared that “Unless the world community acts decisively and with greater urgency, it is more likely than not a weapon of mass destruction will be used in a terrorist attack”

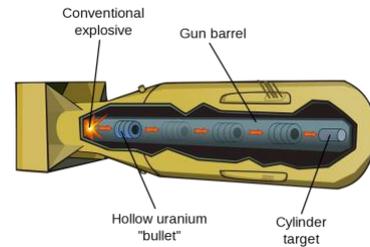
We have established that nuclear terrorism is a great threat, however, to grasp the essence of the issue we must also consider what makes the terrorists that have access to nuclear weapons particularly dangerous. Terrorists, radicalized in their views, are willing to put civilian lives in danger and will try and overcome any obstacle to attain their goal. Terrorists aren't looking for the biggest stockpile when creating a bomb; they will go where nuclear materials are vulnerable. Global nuclear security is only as strong as the weakest link in the chain. This further highlights the global nature of the issue and its importance to our collective security. The preventability of nuclear terrorism is only defined by one parameter: our ability to secure nuclear weapons and materials to a gold standard, far beyond the reach of terrorists and thieves. The United Nations Security Council Resolution 1887 calls for member states to "raise standards of nuclear security to reduce the risk of nuclear terrorism, with the aim of securing all vulnerable nuclear material from such risks within four years". The question remains, however, how do we ensure nuclear security?



Definition of Key Terms

Fissile material

According to Britannica, Fissile material is defined as “any species of atomic nucleus that can undergo the fission reaction”.



Nuclear weapons

Under US Law, a nuclear weapon is defined as “any weapon that derives its destructive force from nuclear reactions. The nuclear reaction may either be fission or a combination of fission and fusion”. It further also notes that nuclear weapons are classified as weapons of mass destruction. Furthermore, the law also states that a nuclear weapon is any weapon that contains nuclear material. Nuclear material is further defined as any fissile material, usually containing plutonium, uranium, enriched uranium, or uranium isotope 233 or 235.

Terrorist organization

Terrorism is defined as “the systematic use of violence to create a general climate of fear in a population and thereby to bring about a particular political objective”. The US Court further defines a terrorist organization as any organization “directly or indirectly engaged in preparing, planning, assisting or fostering the doing of a terrorist act”.

Collective security

According to the Britannica Encyclopedia, collective security is a system where states work together to prevent or stop conflict. In the context of terrorism, it is a system in which states work together to suppress terrorist groups that threaten the security of more than one nation.

Terrorist organizations generally have influence that supercedes sovereign borders and is thus always an issue of collective security. Britannica further fleshes this out by explaining that “Under a collective security arrangement, an aggressor against any one state is considered an aggressor against all other states, which act together to repel the aggressor”.

General Overview

Known nuclear terrorists and their capacity

Many terrorist groups are interested in acquiring nuclear weapons, however, only few are capable of acquiring and using these weapons. The 5 terrorist groups that have been identified with these capabilities are Al Qaeda, the North Caucasus-based separatists, Lashkar-e-Tayyib, Hezbollah, and the Taliban. Al Qaeda and Aum Shinrikyo have previously attempted to buy nuclear materials on the black market. Al Qaeda has strategically been attempting to acquire or make a nuclear weapon for the last ten years. In 1998, Osama bin Laden issued a statement announcing the, "The Nuclear Bomb of Islam," declaring that "It is the duty of Muslims to prepare as much force as possible to terrorize the enemies of God."

How could terrorist groups acquire nuclear weapons?

Nuclear terrorists aren't bothered with the highly secured nuclear stockpiles of the military and instead turn to other alternatives. There are hundreds of potentially unsecured locations holding nuclear weapons or usable materials. The central problem is that there is no binding global standard about how these materials should be secured. Currently, there are more than 10 research reactors that use HEU which are in unsecured areas, mostly in developing and transitional countries.

In the scenario that terrorists do acquire nuclear material the U.S. Office Of Technology Assessment (1977) has predicted that: “A small group of people, none of whom have ever had access to the classified literature, could design and build a crude nuclear explosive device... [Only] modest machine-shop facilities that could be contracted for without arousing suspicion would be required”.

Although there are no known cases where terrorists have acquired fissile material, many attempts have been made. 20 bombs' worth of HEU was discovered in Kazakhstan in 1993 in a poorly secured building. In 2006, a Russian citizen was arrested for carrying 100 grams of HEU in Georgia and attempting to find a buyer for the fissile material. In the Pelindaba nuclear facility in South Africa in 2007, two armed teams broke into the site where an estimation of 30 weapons worth of HEU was stored. The security was so poor that the perpetrators managed to overcome a

10,000 volt fence, break into the emergency control center, enter without triggering an alarm, shoot a worker, and escape successfully.

Between 1993 and 2008, 421 of such cases have been reported to the IAEA by member states of which 18 have been confirmed. Even in Europe, where 150-240 U.S. nuclear weapons are held. Security standards do not meet the U.S. security standards according to a 2008 internal U.S. Air Force Investigation.

The nuclear weapons black market

Our main concern with illicit nuclear weapons trafficking is that we have more questions than answers. Two of these questions are integral to the issue at hand. Firstly, are HEU or Pu available for illegal purposes in quantities sufficient to produce a nuclear weapon? Secondly, are sellers of fissile material, or any intermediaries involved, capable of finding buyers and vice versa.

Some experts have claimed that organized criminal groups have already infiltrated nuclear facilities and that there are nuclear scientists at those facilities who may be trying to sell these nuclear materials. For example, a senior Russian nuclear physicist claims that “it is possible to purchase 'anything in our country [Russia] today, including nuclear weapons and materials'. The question remains, however, if the quantity of fissile materials available for purchase is sufficient to produce a nuclear weapon.

In the majority of cases when “plutonium” was offered for sale, the material actually involved was a sealed radioactive source, other radioisotopes, or non-radioactive materials. There are only two cases when illicit trafficking cases actually involved plutonium, both in 1994.

Current evidence from open sources does not suggest that there are any cases of illicit trafficking in HEU or Pu. However, these does not allow us to concretely conclude if any nuclear materials have been in circulation after potential theft in the 1990s, and thus, if any terrorist organizations could potentially get their hands on fissile materials and create a crude bomb. One of the great challenges terrorists face in the illicit trade is the establishment of appropriate connections and building trust between the trafficking actors.

Transportation routes terrorists could use

Nuclear weapons acquired by terrorists could easily be delivered to its target location by using the same routes as drugs, illegal immigrants, and even legal goods. Currently there are 20-30 million unauthorized immigrants and the value of the drugs trafficking market is \$400 billion. In this market only 10-15% of heroin and 30% of cocaine is intercepted worldwide, hence, the chance a nuclear weapon would thus be intercepted is also small. Even through legal routes the chance of

interception is low. The weight of world container trade is about 1.8 billion tons, stopping at 9,000 ports per week. Once a nuclear weapon has been acquired It is virtually untraceable.

Major Parties Involved

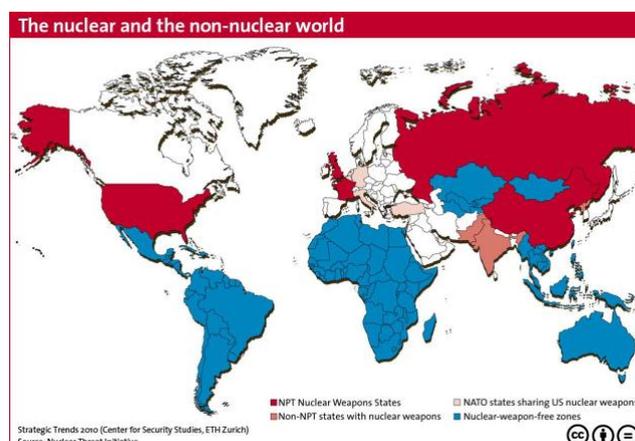
Al Qaeda

Al Qaeda is a radicalized Islamist terrorist group that has been operating since the late 1980's. Al Qaeda has been identified as one of the terrorist organizations that has expressed interest in acquiring a weapon of mass destruction is uniquely an organization that may have the capacity to fulfill this desire.

The now deceased leader of the terrorist group, Osama bin Ladin asserted in 1998 that it was the Islamic duty of Al Qaeda to acquire weapons of mass destruction. He subsequently made this the top priority for his lieutenants. Interpreting this statement as empty rhetoric is extremely dangerous as the malicious intent, idle or not, has great repercussions for the collective security. It is still unclear if the threat of nuclear terrorism from Al Qaeda is fully founded or not and the interpretation of ongoing investigation have caused a great gap between diehard believers and skeptics. Hopefully, further investigation and information will help bridge this gap, while also ensuring we have the means to suppress the threat of nuclear terrorism.

IAEA

The International Atomic Energy Association, a UN affiliated organization is very active on the topic of nuclear safety and security. It produces many articles about nuclear terrorism and has its own nuclear security plan. It acts as a platform for states to discuss nuclear terrorism and is the mediator of many nuclear policy agreements.



Pakistan

Pakistan, host to a number of terrorist organizations including the Taliban and Al Qaeda, has nuclear sites that are very venerable to attack. An article in the 2009 West Point Military

Academy claimed that Pakistan’s nuclear sites have been attacked by these organizations at least three teams. The Pakistani military denies these allegations. There is debate on whether the goal was for the organizations to obtain the nuclear weapons or to cause maximum damage to the facility. The Belfer Centre for Science and International Affairs of Harvard University claimed that Pakistan “faces a greater threat from Islamic terror groups seeking nuclear weapons than any other nuclear stockpile on earth”.

Timeline of Key Events

Date	Description of event
August 1942	Manhattan Project established, development of first nuclear weapon
August 1945	US detonates two nuclear bombs over Japan
August 1949	Russia develops first nuclear weapon
October 1952	UK develops first nuclear weapon
February 1960	France develops first nuclear weapon
October 1962	Cuban Missile Crisis (height of the cold war)
October 1964	China develops first nuclear weapon
February 1968	Non-Proliferation Treaty is signed
May 1974	India conducts first nuclear test
September 1986	Israel’s nuclear programme is revealed
December 1987	Intermediate-range missiles banned (INF)
December 1991	Dissolution of Soviet Union (end of cold war)
September 1996	Comprehensive Total Nuclear Test Ban (CTBT) is signed
May 1998	India-Pakistan small scale nuclear arms race
September 2001	Al Qaeda commits a major terrorist attack known as 9/11
2002	Al Qaeda declares desire to obtain nuclear weapon
October 2006	North Korea develops first nuclear weapon
2015	Russia violates INF
January 14, 2017	Trump announces withdrawal from INF
July 2017	Nuclear weapon ban treaty adopted by UN (2/3 majority)

Previous attempts to resolve the issue

Since the dawn of the nuclear age, the international community has put heavy emphasis on the importance of nuclear security and has produced many agreements on the matter. Notable of which is the Security Council resolution 150, which “calls upon all states to develop and maintain effective border controls and law enforcement efforts to detect and combat illicit trafficking, and to refrain from providing any form of support to non-State actors that attempt to develop, acquire, use or transfer nuclear, chemical or biological weapons or their delivery systems.”

International bodies such as the IAEA have produced many legal instruments such as the Convention on the Physical Protection of Nuclear Materials (CPPNM). The main issue with agreements such as these is that they quickly become outdated. With rapid globalization and technological advancements, the security landscape is also quickly evolving, and the scope of the agreements must continuously be amended. This agreement for example, is lacking in its comprehensiveness of solutions to the physical protection of nuclear materials that are intended of peaceful purposes, particularly on how to safeguard peaceful nuclear facilities against sabotage. Other agreements produced by the IAEA include the Code of Conduct on the Safety and Security of Radioactive Sources.

Finally, regional solutions like the European Council’s EU Strategy against the Proliferation of Weapons of Mass destruction. Regional solutions are often particularly effective as the need collective security is much more apparent between neighboring countries and because of existing trust between countries it is easier to move forward with solutions.

Possible Solutions

There are three main points of focused that need to be addressed, namely; prevention, detection, and response to nuclear terrorism. There are several approaches to these points of interest that can be evaluated and discussed during debate.

Firstly, the objective of assisting states in the prevention of terrorist acquiring nuclear weapons includes multiple aspects. There is the effective physical protection of these materials and there is the storage and transportation of the materials. Currently, the IAEA has a range of international advisory service missions and technical guidance documents, however, to increase the effectiveness of the cooperation concerning collective security, intra-state cooperation is also essential. It is thus encouraged that a framework should be set up to share security technology between states to ensure maximum protection of the venerable materials, benefiting all states.

Secondly, we must ensure that we have thorough systems in place that can aid countries in identifying, at the earliest stage possible, illicit activity related to nuclear materials. This could include a range of measures including the training of customs officials, improved technology at border crossing and better mechanisms for information sharing on trafficking incidents.

Finally, it is essential that a thorough and effective mechanism is put in place so that in the case of a nuclear terrorism threat, individual nations and the international community can respond promptly and in a well-coordinated manner.

Other solutions include adopting regional agreements such as the EU Strategy against the Proliferation of Weapons of Mass destruction. Furthermore, it is quintessential to the issue that member states are ready to open themselves up to assistance to improve legislative and technical infrastructures. Member states must realize that the security of the

Appendix/Appendices

- I. Analysis of denuclearization in various countries <https://www.nti.org/analysis/articles/>
- II. The Convention on the Physical Protection of Nuclear material:
<https://www.iaea.org/sites/default/files/infcirc274.pdf>
- III. Eu Strategy against proliferation of weapons of mass destruction:
http://trade.ec.europa.eu/doclib/docs/2004/august/tradoc_118532.en03.pdf

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