

Disarmament and International Security Council

TOPIC B:

The question of Implementing Measures to Prevent Terrorists from Acquiring Radioactive Sources

Introduction:

This research paper will cover the topic of the acquisition of radioactive sources by terrorists and terrorist groups. Involved and affected countries and groups, previous efforts and conflicts, relevant resolutions and current situations will all be taken into account when searching for possible solutions for this issue. This paper will aim to define the issue, its causes and examples, and draw conclusions and possible resolutions.



Definition of some key terms:

Terrorism: threats of, or violent actions for political purposes. It is to be noted that the definition of 'terrorism' has over 100 forms, with different factors taken into account. It is a very loose term with much room for disagreement, but this definition settles for a more broad description. ¹

Radioactive Sources: a quantity of radionuclide that emits ionizing radiation and can be extremely harmful. ²

Background Information:

One of the main concerns surrounding radioactive terrorism, is the number of ways in which it can be performed. An attack with radioactive substance can be carried out through the detonation of explosive devices, construction of a nuclear fission weapon, the spreading of

¹ "Terrorism: Translate English to Italian." *Cambridge Dictionary*, <https://dictionary.cambridge.org/dictionary/english-italian/terrorism>.

² Foro Nuclear. "What Is a Radioactive Source, and What Is It for?" *Foro Nuclear*, <https://www.foronuclear.org/es/ask-the-expert/121023-what-is-a-radioactive-source-and-what-is-it-for>.

radioactive material in highly populated areas, the targeting of nuclear facilities, or dispersal of material into the environment or groundwater.

Radioactive, or radiological, terrorism is a rare and extremely complex form of terrorism, its effects are devastating. There have been several instances of intercepted or prevented attacks - such as the six cases, since 1992, in which highly enriched plutonium or uranium loads were intercepted by authorities in their passing in or out of the former Soviet Union.³

Major Countries and Groups Involved in The Issue⁴:

Al-Qaeda: According to Osama Bin Laden's testimonies and leaked diplomatic documents, al-Qaeda can produce radiological weapons. Working closely with the North Caucasians terrorist groups, they have tried to attack through the Islamic Caliphate in Russia, radioactive storage facilities from disused power plants.

ISIS: A few years back during the Iraqi war, ISIS militant groups have captured some materials from Mosul University as they have big ambitions on creating a 'dirty bomb'. However, a letter to Ban Ki-Moon (former SG of the UN), Iraq's ambassador said that the chance or ISIS to create WMD is small, but not impossible.

North Caucasus Terrorists: This terrorist group has tried to seize a Russian nuclear submarine with nuclear weapons on it, but failed. Even though, it does carry out reconnaissance missions on radioactive storage facilities, therefore, planning a devastating attack within Russia, after threatening to sabotage nuclear facilities.

Pakistan: Since Pakistan has been confirmed by the Prime Minister that it is a Nuclear Weapon state, even after being condemned by the international community, its nuclear facilities have been attacked by the Taliban and Al-Qaeda at least 3 times. However, these suicide attacks were meant to cause 'unforeseen damage', not acquiring the technology.

³Hagby, Moti, et al. "Health Implications of Radiological Terrorism: Perspectives from Israel." *Journal of Emergencies, Trauma, and Shock*, Medknow Publications, May 2009, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2700597/>.

⁴ Brill, Kenneth C., and John H. Bernhard. "Preventing Nuclear Terrorism: Next Steps in Building a Better Nuclear Security Regime." *Arms Control Association*, Arms Control Association, Oct. 2017, www.armscontrol.org/act/2017-10/features/preventing-nuclear-terrorism-next-steps-building-better-nuclear-security-regime

France: Due to its nuclear powerplant might, France is being extra cautious with the handling of the waste and the safety of the Nuclear power stations since France is one of the top countries by the risk of terrorist attacks.

United States: According to Barack Obama and W. Bush, the threat of terrorists acquiring radioactive sources is the most dangerous possibility that could affect the national security of the US. However, the danger is due to the weakness in the US's socio-economic capabilities, since a detonation of an insurgent radioactive source, could overwhelm the country causing it to crumble in more areas than just the one location of the terrorist attack. For example, public & emergency services and economically.

UN Treaties/Historical Events:

The Nuclear Terrorism Convention is a treaty adopted by the UN in 2005, in order to criminalize acts of terrorism using nuclear and radioactive sources, and to call for more cooperation. As of late 2018, 115 countries have signed the treaty. The treaty is very extensive and tries to target all facets of the issue, including the acquisition and possession of materials, attacks on nuclear power plants or reactors, protection and security before, during and after a possible attack.⁵

The Treaty on the Non Proliferation of Nuclear Weapons essentially aims to reduce the use and distribution of nuclear and radioactive weaponry, and call for peaceful cooperation. On May 11, 1995 the signing of the treaty was extended indefinitely and put into force in 1970. The five nuclear weapon states are amongst the 191 signatories. The treaty is set to be reviewed every five years.⁶

The International Atomic Energy Agency is an international organization that works closely with the UN and EU, amongst other nations, to work for the peaceful development and use of

⁵ "International Convention on the Suppression of Acts of Nuclear Terrorism." *Nuclear Threat Initiative - Ten Years of Building a Safer World*, <https://www.nti.org/learn/treaties-and-regimes/international-convention-suppression-acts-nuclear-terrorism/>.

⁶ "Treaty on the Non-Proliferation of Nuclear Weapons (NPT) – UNODA." *United Nations*, United Nations, <https://www.un.org/disarmament/wmd/nuclear/npt/>.

nuclear technologies. The IAEA Statute reports to both the UN General Assembly and the Security Council, and currently has 171 member states.⁷

Main Issues:

The acquisition of fissile material

Plutonium or highly enriched uranium would be necessary to generate a nuclear attack. While sufficiently enriched plutonium is difficult to find and is not generally used in nuclear power plants, highly enriched bomb-grade uranium can be found to power nuclear submarines or certain research reactors. Issues are faced in the security measures that need to be taken in order for these materials not be diverted to terrorist organizations, and not to be exposed to possible attacks.⁸

The detection and prevention

The elements and materials being handled pose such imminent threats that the strictest prevention methods must be implemented. Policies on the detection and eradication of terrorist groups pose one of the greatest issues.⁹

Support in stopping attacks

A more societal facet of the issue is awareness and support of the international community. Many issues arise concerning relations between countries and the possible transportation of radioactive sources between them. It raises the ethical issue of how terrorism should never be used as a political weapon amongst the international community and governments.¹⁰

⁷ "The Statute of the IAEA." *IAEA*, IAEA, 2 June 2014, <https://www.iaea.org/about/statute>.

⁸ "Prevent Nuclear Terror." *Grand Challenges - Prevent Nuclear Terror*, <http://www.engineeringchallenges.org/challenges/nuclear.aspx>.

⁹ "Prevent Nuclear Terror." *Grand Challenges - Prevent Nuclear Terror*, <http://www.engineeringchallenges.org/challenges/nuclear.aspx>.

¹⁰ "Prevent Nuclear Terror." *Grand Challenges - Prevent Nuclear Terror*, <http://www.engineeringchallenges.org/challenges/nuclear.aspx>.

Relevant UN Resolutions:

A/71/66 (71st Session of the GA) - Preventing the acquisition by terrorists of radioactive sources¹¹

Particularly for Operative Clauses: 6, 8, 10, 12

This resolution from 2016 is a great example of how the General Assembly already attempted to solve the issue posed by terrorists acquiring radioactive sources. It endorses the work done by the International Atomic Energy Agency (organisations tasked to control also nuclear weapons) for the surveillance efforts over radioactive sources. Moreover, said locations, where radioactive sources could be stored such as nuclear waste, would have to be protected by member states since this is the weak point in the system where terrorists could develop a dirty bomb. In fact, this is also mentioned in the Code of Conduct of the IAEA which states that facilities should be protected under national laws and policies, limiting the involvement of the international community.

A/73/66 (73rd Session of the GA) - Preventing the acquisition by terrorists of radioactive sources¹²

Particularly for Operative Clauses: 1, 4, 10

On the basis of the previous resolution, this one from approximately 2 years later was written over resolution A/71/66 with slight variations to adopt the requests made by several nations such as the People's Republic of China and the Russian Federation. In fact, it does state that if necessary, the act of terrorists acquiring undisclosed radioactive sources can be dealt with the accordance of national legal authorities by any means possible. This does obscure the fact that nations could diplomatically hide their radioactive installations to prevent attacks from insurgent groups, going against certain principles made by the IAEA. The Guidance on the Management of Disused Radioactive Sources is an entity that is tasked for the previously mentioned issue not to occur.

Convention on the Physical Protection of Nuclear Material (CPPNM)¹³

¹¹ "Preventing the acquisition by terrorists of radioactive sources", General Assembly, *United Nations*, 5 December 2016, https://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/71/66

¹² "Preventing the acquisition by terrorists of radioactive sources", General Assembly, *United Nations*, 13 December 2018, <https://undocs.org/pdf?symbol=en/A/RES/73/66>

¹³ "Convention on the Physical Protection of Nuclear Material", CPPNM, *United Nations*, 8 February 1987, https://media.nti.org/documents/cppnm_7eHleau.pdf

Especially Articles: 7, 8, 16, 18,

Even though this isn't a UN resolution, it is an official treaty/convention that came into force in 1987, tasked to endorse the protection and surveillance of Nuclear Material in storage facilities, government warehouses, power plants or nuclear installations. Basically, this document may be useful to find useful clauses to add to the delegate's resolutions, such as the ways countries should approach this issue, and how certain terrorist groups should be dealt with. In fact, with terrorist organisations and insurgent groups such as Al-Qaeda and the Taliban being founded, acts of terrorism were increasing, however, up until now, no group has managed to acquire nuclear weaponry or WMDs (according to UN publications).

Possible Solutions:

As all issues discussed here at MUN, there is no one solution to solve everything, in fact, not even us Chairs can provide delegates with possible comprehensive solutions without favouring one country. However, in our opinion, as unbiased moderators of the debate have come up with some steps that the International Community could take in tackling the threat posed by Terrorists acquiring Radioactive Sources.

A plausible solution to this obscure issue, would be to increase security around radioactive installations, not only for health and safety, but the acquisition by terrorists, just as the previous UN resolutions have been working on. However, these bases where dangerous radioactive sources should be stored should maybe be overlooked by an international entity, so that no state would be pushed to creating nuclear weapons of their own. Although, close regard has to be taken when radioactive sources are being transported since terrorist groups could infiltrate also outside affected areas of conflict such as in Syria or Somalia.

Moreover, radioactive installations should be kept as far away as possible from previously conflict areas so that as distances become longer from the headquarters of insurgent groups, weaker responses can be expected. Furthermore, border controls could be strengthened, since if terrorists do acquire radioactive sources, it would be much harder for these militants to escape without notice and enter conflict zones.

Radioactive waste, exhausted fuel and other radioactive sources could also be tracked so that if they are stolen as mentioned earlier, finding a way out of the system would be hard for the militants. What is more, these areas of depot should be kept a secret so that only the Arms Control Association would know the exact location, beating down a possibility for the public to know where to look.

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