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## **Review of the devices of international law : a special focus on treaties and compliances, in relation to Nuclear Security and Disarmament**

The Treaty on the Prohibition of the Spread of Nuclear Weapons: An Overview (NPT) The Treaty on the Non-Proliferation of Nuclear Bombs (NPT) refers to the United States, Russia, the United Kingdom, France, and China as "nuclear weapon states" since they developed and used nuclear bombs or other nuclear explosive devices before January 1, 1967. (Art. 9-3) The treaty aims to prevent the spread of nuclear weapons to other states while also obliging the nuclear armed states to continue nuclear disarmament negotiations (non-nuclear weapon states). The contract was made ratifiable in March 1970 and made available for signature in July 1968. (Japan ratified the treaty in June 1976 after having signed it in February 1970.)

It is safe to say that the NPT's universality has prevailed as of October 2003, when 189 state parties have ratified the agreement. Out of the 191 UN members, just three nations—Israel, Pakistan, and India—have not yet signed the agreement. The NPT is made up of a prologue, eleven articles, and a conclusion. The four provisions of the pact are as follows, broadly divided: In accordance with Article I of the Nuclear Non-Proliferation Treaty (NPT), nuclear weapons cannot be transferred between nuclear weapon states, and nuclear weapons cannot be acquired or produced by non-nuclear weapon states (Article II).

The treaty obliges non-nuclear weapon state parties to the NPT to accept the International Atomic Energy Agency (IAEA) safeguards (Article III).

### **Treaty on the Non-Proliferation of Nuclear Weapons (NPT)**

Rights to the peaceful use of nuclear energy, The NPT tries to prevent nuclear weapon nations from using nuclear resources and technology for military purposes by compelling these governments to adopt IAEA safeguards. The accord, however, declares that advancing nuclear energy research, production, and use for peaceful purposes is a "inalienable right of all the Parties to the Agreement" (Article IV-1). It acknowledges that all Treaty Parties have the right to exchange as much information, tools, and materials as possible for the peaceful uses of nuclear energy (Article IV-2).

Nuclear Disarmament and Non-proliferation presents an obligation on nuclear weapon states to engage in nuclear disarmament negotiations. In accordance with the safeguards agreement, the IAEA carefully monitors the quantity of radioactive materials stocked at, transported into or out of, lost from, or remaining in a nuclear site to determine whether or not the diversion happens. "A system of accounting for and control of all nuclear material" is the name given to this technique for precisely regulating the quantity. Non-nuclear weapon states that are NPT signatories must reach an agreement with the IAEA for comprehensive safeguards for all nuclear materials and are required to adopt IAEA safeguards in accordance with the agreements.



## History and Background of the Nuclear Dilemma

The definition of a nuclear weapon is a device intended to release energy in an explosive way using nuclear fusion, nuclear fission, or a combination of the two processes. Atomic bombs are the term used frequently to describe fission weapons. Fusion weapons are also known as thermonuclear bombs or, more popularly, hydrogen bombs; they are typically characterized as nuclear weapons in which nuclear fusion is responsible for the release of at least some of the energy.<sup>8</sup>

However, as the Cold War heated up, proliferation took place, first with the Soviet Union, then with American allies, and last with China. Although it has not been proved, it is widely thought that Israel produced a nuclear bomb circa 1967. 12 Nuclear weapons remained a drag on international relations even after the end of the Cold War. Through a succession of nuclear weapons treaties, such as the 1991 Strategic Arms Reduction Treaty (START), Russia and the United States significantly decreased their nuclear arsenals, but reductions halted after 2010. The Strategic Offensive Reductions Treaty (SORTS), which both countries signed and approved in that year, allows them to retain thousands of undeployed warheads while limiting each to 1,550 deployed strategic nuclear weapons. The future of SORTS is unclear. It is set to expire in 2021. Weapons States are much smaller, but not bound by any treaty.

Although nuclear bombs have not been used since 1945 to destroy enemy targets, they are nonetheless extensively deployed and regularly utilized for nuclear deterrent. According to this reasoning, nuclear weapons are necessary to prevent nuclear war. The majority of nuclear forces are either in submarines that are ready for alert or in reinforced silos. However, even deterrent troops have the ability to launch an initial attack, leading to rising tensions and unpredictability. The conundrum of nuclear weapons is providing security while posing the grave and morally dubious threat of mass annihilation.

Two significant precedents have been set that are essential to the Nuclear Weapons Ban Treaty. First is the Treaty on the Prohibition of Nuclear Weapons (the NPT). The treaty was opened for signatures in 1968 and entered into force the following year after being ratified by 40 signatories. The treaty sought to prevent the spread of nuclear weapons by barring nuclear-armed governments from supplying other nations with such weapons or the technology to produce them. However, it also includes the following requirement for countries with nuclear weapons, or Nuclear Weapons States (NWS), as they are known in the treaty: Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control (NPT, Article VI)

The Comprehensive Test Ban Treaty is the other crucial precedent (CTBT). "Each State Party agrees not to carry out any nuclear weapon test explosion or any other nuclear explosion, and to ban and prevent any such nuclear explosion at any area under its jurisdiction or control," reads the 1995 agreement.



## **PROPOSAL FOR ACTION**

Maintain current agreements: The General Assembly can, at the very least, demand that all countries uphold current agreements, particularly the Comprehensive Nuclear Test Ban Treaty (CTBT) and the Nuclear Nonproliferation Treaty (NPT), which call for nuclear disarmament (CTBT). Even this might be controversial for some nuclear weapon states, especially the United States. The other important precedent is the Comprehensive Test Ban Treaty (CTBT). The 1995 agreement states that "each State Party undertakes not to conduct any nuclear weapon test explosion or any other nuclear explosion, and to ban and prevent any such nuclear explosion in any region under its authority or control."

Supporters of the Nuclear Weapons Ban Treaty will also be leery of paying more attention to current agreements because they think that doing so will serve to divert attention away from the more ambitious and declared goals of the treaty. Additionally, many members of the latter group feel more passionately about the unfairness of the NPT than they do about the CTBT.

Encourage signatures and ratifications of the Nuclear Weapons Ban Treaty: So far treaty supporters have relied on the good will of Member States and domestic political pressure to win government action. But signatures have slowed and progress on action ratification to extremely slow, limited mostly to smaller and peripheral states. If universal nuclear disarmament is a basic necessity, say its supporters, then advocates need to make it their highest priority. Sanctions on travel by against individuals and firms associated with nuclear weapons is a start. Sanctions on trade with countries that have nuclear weapons, or permit foreign nuclear weapons to be based on their territory, could be a next step to add pressure.



## **“SECURITY THREATS POSED BY RADIOACTIVE MATERIAL AND ASSOCIATED FACILITIES”:**

### **Focus Points:**

- 1. Background**
- 2. Scope**
- 3. Nuclear Security Plan: Objectives of a State’s Nuclear Security related to the agenda item**
- 4. Nuclear Security Plan: Elements of a State’s Nuclear Security related to the agenda item**
- 5. Conclusion**
- 6. Further Topics of Discussion**

### **1. BACKGROUND:**

Under the IAEA’s Nuclear Security Series, the following are the categories which are explored and upon which recommendations are made to Member States:

- **Nuclear Security Fundamentals** determine the goal of a State's Nuclear Security system and the fundamental components of such a system. They give the premise to the Nuclear Security Recommendations.
- **Nuclear Security Recommendations** set out measures that States ought to take to accomplish and keep a viable public Nuclear Security system steady with the Nuclear Security Fundamentals.
- **Carrying out Guides** give direction on the means by which States could execute the actions set out in the Nuclear Security Recommendations. Thusly, they center around the most effective method to meet the proposals connecting with wide areas of Nuclear Security.
- **Specialized Guidance** gives direction on unambiguous specialized subjects to enhance the direction set out in the Implementing Guides. They center around subtleties of how to execute the fundamental measures.

The primary reason behind having a series based on Nuclear Security, is to prevent nuclear or other radioactive material to be utilized in criminal or deliberate unapproved acts, making a danger to worldwide security. The IAEA, hence, helps policymakers and specialists to work on nuclear security, oversee radioactive sources and combat nuclear terrorism.

### **2. SCOPE:**

During committee proceedings, we will be focusing on the security of radioactive material being used or away, as well as related offices and related exercises, against unapproved expulsion of the radioactive material and harm performed with the plan to cause destructive radiological results.



Security alludes to both security frameworks and executive measures. The IAEA, through its publications, tends to the security of radioactive material all through its life cycle, including produce, supply, receipt, ownership, capacity, use, move, import, trade, upkeep, reusing and removal.

As referred to during actual IAEA proceedings, radioactive material incorporates radioactive sources and unlocked radioactive material under administrative control, including radioactive material over which administrative control has been acquired or recovered. Where fitting, States may likewise consider the utilization of this direction to radioactive waste, as recommended by the IAEA.

Expulsion and damage, unapproved evacuation are agenda items that can be further discussed. These actions will likewise give some capacity to counter damage. Nonetheless, to the degree that harm addresses a specific worry to the State or the administrative body, extra or more severe safety efforts past those examined in this direction might be proper.

### **3. NUCLEAR SECURITY PLAN: OBJECTIVES OF A STATE'S NUCLEAR SECURITY RELATED TO THE AGENDA ITEM**

Vindictive acts including radioactive material, related offices and related exercises that could bring about a nuclear security occasion include:

— Unapproved evacuation of radioactive material for:

- Use in a radiological dispersal gadget, a gadget intended to spread radioactive material utilizing regular explosives, or by different means, to cause wellbeing impacts or defiling ground, structures and framework, prompting forswearing of admittance to these areas, or disavowal of administration from the foundation;
- Use in a radiation openness gadget, a gadget intended to purposefully uncover individuals from general society to radiation, like the conscious situation of unshielded radioactive material in a public region, or the conscious arrangement of radioactive material in food or water to cause radiation dosages or harming through ingestion.

— Harm of radioactive material or a related office request to accomplish at least one of similar purposes. The targets of a nuclear security system for radioactive material, related offices and related exercises ought to be:

— Assurance against unapproved expulsion of radioactive material utilized in related offices and in related exercises;

— Assurance against damage of other radioactive material, related offices, and related exercises;

— Guaranteeing the execution of fast and thorough measures to find, recuperate, as fitting, radioactive material which is lost, missing, or taken and to restore administrative control.



## **MEANS OF ACHIEVING THE OBJECTIVES**

These targets are acknowledged through safety efforts to discourage, distinguish, delay, and answer an expected malignant demonstration, and to accommodate the security the executives of radioactive material and related offices and related exercises.

These safety efforts ought to be founded on a risk-informed reviewed approach, considering the standards of hazard the executives, including such contemplations as the possible radiological results of a pernicious demonstration, the degree of danger and the general engaging quality of the radioactive material for a malicious act (considering such factors as amount, physical and synthetic properties, versatility, accessibility, and availability).

Suitable safety efforts ought to be adjusted relying upon whether the radioactive material concerned is fixed, unlocked, neglected, or squandered. This evaluated approach guarantees that the most elevated outcome material gets the best level of safety.

Perceiving the cultural advantages of utilizing radioactive material, the nuclear security system ought to endeavor to accomplish a harmony between overseeing radioactive material safely without unduly restricting the objectives of those helpful exercises.

## **4. NUCLEAR SECURITY PLAN: ELEMENTS OF A STATE'S NUCLEAR SECURITY RELATED TO THE AGENDA ITEM**

### **STATE RESPONSIBILITY**

The obligation regarding the foundation, execution and upkeep of a nuclear security system inside a State rests totally with that State.

The State ought to find proper ways to guarantee that the nuclear security system includes the insurance of radioactive material inside the State's domain, or under its purview or control. The administrator ought to be appointed prime liability regarding executing and keeping up with safety efforts for radioactive material, related offices, and related exercises.

### **ASSIGNMENT OF NUCLEAR SECURITY RESPONSIBILITIES:**

The State ought to plainly characterize and relegate nuclear security obligations to equipped specialists, taking note of that they might incorporate administrative bodies, policing, and line control, insight and security organizations, wellbeing offices, and so on.

The State ought to plainly characterize and dole out nuclear security obligations to at least one skillful specialist and give upon each the powers important to carry out their appointed roles.

Arrangements ought to likewise be made for proper mix and coordination of obligations inside the State's nuclear security system. Clear lines of liability and correspondence ought to be laid out and recorded between the skillful specialists.

The State ought to guarantee viable generally participation and significant data sharing among the able specialists. This ought to incorporate sharing of applicable data, (for example, data about the danger to be safeguarded against and other valuable knowledge) as per public guidelines.



The State might consider laying out an organizing body that incorporates delegates of skillful specialists with relegated nuclear security obligations and that meets routinely to guarantee satisfactory combination, correspondence, and coordination. One of the capable specialists ought to be appointed as the lead of the organizing body. The State might consider advancing the utilization of such instruments as memoranda of understanding, between organization arrangements and so forth for of working with participation and data dividing between equipped specialists.

### **INTERNATIONAL COOPERATION AND ASSISTANCE:**

States are urged to collaborate and counsel, and to trade data on nuclear security strategies and practices, either straightforwardly or through significant global associations.

Each State ought to consider whether, under what conditions and how much it will help different States, including the suitable sharing of data and information received from its public nuclear security system, having respect to the delicate idea of nuclear security data and the need to safeguard it and offer it based on the State's public legitimate structure.

While some confidential data ought not be shared, other valuable data, for example, great practices might be partaken in studios, preparing projects and gatherings. Data can likewise be shared through the IAEA without attribution.

States concerned ought to, as per their public regulations, give participation and help to the greatest possible degree in the area and recuperation of radioactive material to any State that so demands.

To report nuclear security occasions, States also consider laying out appropriate plans to empower them to take part in important territorial and global data sets and worldwide exercises as per their public regulation. One model is the IAEA's Incident and Trafficking Database (ITDB). Thought ought to likewise be given to other respective and multilateral help plans.

Arrangement of opportune data to States and the IAEA in regards to missing or taken radioactive material means quite a bit to help with its area and recuperation. Warning given to States and the IAEA regarding nuclear security events including radioactive material could likewise help with distinguishing and tending to potential dangers related with the material implied. Data might be given on a willful premise to the IAEA Incident and Trafficking Database.

States may likewise decide to utilize different systems laid out by the IAEA for telling different States, sharing data, and getting monetary or specialized help in case of a nuclear or radiological crisis set off by a nuclear security occasion like the unapproved expulsion of radioactive material.

On account of unapproved expulsion of radioactive material, the impacted State might benefit especially from help from adjoining States in finding and recuperating the missing radioactive material, assuming it could have entered or gone through those States. Recognition of the material will be subject to the system(s) for identification of nuclear and other radioactive material out of administrative control in the State where the material is or through which it is passed.

State resources for nuclear security are particularly significant on account of unapproved expulsion or damage, to work with imparting fundamental data instantly and precisely to adjoining States and other concerned parties. Such correspondence could happen either straightforwardly or through the IAEA.



State resources for nuclear security may likewise be helpful in imparting other significant nuclear security data pertinent to security of radioactive material, related offices, and related exercises, like data about new dangers of normal concern. These resources are most helpful when laid out ahead of a nuclear security event.



## **IDENTIFICATION AND ASSESMENT OF THREATS:**

The State ought to evaluate its public danger for radioactive material, related offices, and related exercises. The State ought to occasionally survey its public danger, and assess the ramifications of any progressions in the danger for the plan or update of its nuclear security system.

The plan and assessment of safety frameworks ought to consider the ongoing public danger appraisal for radioactive material, related offices and related exercises, and the relevant design-based threat(s) (DBT) as well as representative threat statement(s) (RTS).

The cycle for evaluating the public danger for radioactive material, related offices and related exercises and utilizing this data is examined in the accompanying subsections.

The public danger appraisal for radioactive material, related offices and related exercises is an assessment of the dangers to radioactive material and related offices and related exercises — in view of accessible knowledge, policing open-source data — that portrays the inspirations, aims and capacities of possible enemies to commit noxious demonstrations.

The public danger evaluation for radioactive material, related offices and related exercises will be essential for the public nuclear security danger appraisal and might be important for a more extensive public danger appraisal. For straightforwardness, the public danger evaluation for radioactive material, related offices and related exercises is alluded to as the 'public danger appraisal' in the accompanying area.

Wellsprings of data for the public danger appraisal ought to incorporate, as suitable, knowledge associations, including security organizations, PC and data security associations, policing, the International Criminal Police Organization-INTERPOL, the administrative body for nuclear security and other able specialists, customs and line offices, the tactical administrations, transporters and transporters, official government detailing, occurrence announcing by administrators, information bases kept up with by global associations and other open sources. The public danger evaluation ought to be refreshed on an ordinary premise or when conditions make it important, for example, when new data relating to dangers is procured.

Administrative necessities for the plan and assessment of safety frameworks ought to consider the ongoing public danger appraisal to characterize the capacities of the foe, whether an insider or outer, that the security framework requirements to address.

One strategy for involving danger data in laying out administrative necessities is for the equipped power liable for the public danger evaluation to give a RTS, in view of the consequences of the public danger appraisal, to the administrative body for its adaption and use in the advancement of its administrative prerequisites for security of radioactive material, related offices and related exercises. Where this technique is picked, the administrative body lays out guidelines that require the administrator to execute a security framework which, considering the administrative body's evaluation, will safeguard against a foe with the traits and qualities distinguished in the RTS.

On the other hand, the public danger evaluation can be utilized to create and apply a DBT, which the administrative body could adjust and give to the administrator as a reason for the administrator to plan and execute a security framework to meet administrative necessities.



In choosing whether to apply the public danger evaluation through a DBT or an RTS, the State ought to think about a few elements, including the seriousness of the results related with pernicious demonstrations including radioactive material in the State, the capacity to lay out successful security frameworks utilizing each administrative methodology and the capacity of the administrative body to execute the different administrative methodologies.

## **5.CONCLUSION**

Committee proceedings will warrant a streamlined discussion on issues related to Nuclear Security and Disarmament, and the same should be processed keeping the afore-mentioned considerations in mind.



## **FURTHER TOPICS TO DISCUSS:**

- Discussing Legislative and Regulatory Framework in relation to the agenda item
- Future interfaces of the safety system
- Sustaining National Nuclear Security Plans
- Planning and Mitigation For and response to Nuclear Security Events
- Cross-Border Transportation of Radioactive Material
- Detection of Nuclear Security Events

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