



# **XXIX TecMUN**

## **Weapons of Mass Destruction Commission**



## **XXIX TecMUN**

### **HORARIO DE SESIONES**

#### *Lunes 28 de abril*

Registro	8:00 – 9:00 hrs
Ceremonia de Inauguración	9:00 – 10:00 hrs
Receso	10:00 – 10:30 hrs
Primera Sesión	10:30 – 12:30 hrs
Receso	12:30 – 13:00 hrs
Segunda Sesión	13:00 – 15:00 hrs
Comida	15:00 – 16:00 hrs
Tercera Sesión	16:00 – 18:00 hrs

#### *Martes 29 de abril*

Panel de Discusión	8:00 – 9:30 hrs
Receso	9:30 – 10:00 hrs
Cuarta Sesión	10:00 – 12:30 hrs
Receso	12:30 – 13:00 hrs
Quinta Sesión	13:00 – 15:00 hrs
Comida	15:00 – 16:00 hrs
Sexta Sesión	16:00 – 18:00 hrs

#### *Miércoles 30 de abril*

Séptima Sesión	8:00 – 10:00 hrs
Receso	10:00 – 10:30 hrs
Octava Sesión	10:30 – 12:30 hrs
Receso	12:30 – 13:00 hrs
Novena Sesión	13:00 – 14:30 hrs
Comida	14:30 – 16:00 hrs
Ceremonia de Clausura	16:00 – 17:30 hrs



**XXIX TecMUN Sr.**

**Agenda**

**"Sólo en las manos del hombre está el destino de la humanidad"**

**Secretario General: Aldo Adrián Acosta Medina**

**ASAMBLEA GENERAL**

**Subsecretaría General: Carla Denise Paucic Osorio**

**Asamblea General Plenaria**

*Presidente: Zajari Almaraz Quintana*

- A) Infracción radical egipcia en contra de migrantes refugiados sirios como forma de represión y crímenes dentro de éste y otros países de Medio Oriente.
- B) Inestabilidad política y enfrentamientos militares dentro de Sudán del Sur, resultante de tensiones étnicas, culturales y diplomáticas.

**Primera Comisión en Desarme y Seguridad Internacional**

*Presidente: Juan Ramón Díaz Maldonado*

- A) Acuerdos entre la OTAN y la Federación Rusa en busca de la paz y regulación de armamento peligroso en Medio Oriente.
- B) Consolidación del régimen establecido en el Tratado para la Proscripción de las Armas Nucleares en América Latina y el Caribe.

**Tercera Comisión en Asuntos Sociales Culturales y Humanitarios**

*Presidente: Gabriela Zaragoza Meza*

- A) Convenio del Consejo de Europeo sobre prevención y lucha contra la violencia de mujeres y la violencia doméstica.
- B) Violación de los derechos humanos dentro de las cárceles de América Latina.

**Alto Comisionado de las Naciones Unidas para los Refugiados**

*Presidente: Uriel Trejo Pecero*

- A) Desplazamiento de grupos congoleños a Uganda debido al conflicto M23, medidas para la protección de estos grupos y posible erradicación del conflicto.
- B) Medidas de protección a refugiados centroafricanos y resolución al conflicto de la República Centroafricana.

**Office of the High Commissioner for Human Rights**

*President: Juan Carlos Velázquez Quiroz*

- A) Solutions to an Arising Cultural Hegemony and Talibanisation within Indonesia.
- B) Banditry and insecurity Hindering Humanitarian Efforts in Timbuktu and Fellow Malian Cities.



**Office of the Special Representative of the Secretary-General for Children and Armed Conflict**

*President: Andrea Cuéllar Medina*

A) The Recruitment of Child Soldiers in Darfur, Sudan by the Rebel Sudan Liberation Army.

B) Intimidation and Abduction of Children by Maoist Groups in India for their Recruitment.

**CONSEJO ECONÓMICO Y SOCIAL**

*Subsecretaria General: Paola Rodríguez Escobedo*

**Comité Contra el Terrorismo**

*Presidente: Héctor Palafox Prieto*

A) Disminución de la violencia dentro del territorio libanés provocada por el grupo de Hezbollah.

B) Creación de una resolución para los posibles enlaces entre las protestas civiles en Egipto con grupos de agitadores o terroristas.

**Commission on Crime Prevention and Criminal Justice**

*President: Gil Zárate Santiago*

A) Espionage Activity between Countries and Their Repercussion on Sovereignty.

B) Thailand Violations to International Law towards Military Activity in Cambodia, Modern Irredentism and Measures to Avoid It.

**Programa de las Naciones Unidas para el Medio Ambiente**

*Presidente: Nelly Elizabeth Marín Vargas*

A) Medidas para prevenir y reparar los daños causados por los desechos humanos en el lago victoria en África.

B) Consecuencias para el medio ambiente por las posibles violaciones del Tratado de Prohibición Completa de Ensayos Nucleares.

**Commission on the Status of Women**

*President: Karla Andrea Hernández Andrade*

A) Domestic Violence and Sexual Assaults Against Women in Fiji and the Islands in the Pacific.

B) Eradication of Abortion and Female Infanticide in China and India.

**World Health Organization**

*President: Melanie Vértiz Jiménez*

A) Possible Solutions to the Increasing Levels of Obesity in Urban Settings and Its Multiple Repercussions on Health.

B) Potential Positive Use of Genetically Modified Foods and Their Impact on the Prevention of Diseases and the Eradication of Poverty and Malnourishment.



### **Oficina de las Naciones Unidas contra la Droga y el Delito**

*Presidente: Mariana Ceja Bojorge*

- A) Extensión de la distribución de nuevas drogas como el Krokodil.
- B) Tráfico de mujeres entre Europa Occidental y Rusia.

### **AGENCIAS ESPECIALIZADAS Y ORGANISMOS REGIONALES**

*Subsecretaria General: María del Carmen Salas Alvarez*

### **Council of Europe**

*President: Valeria Fernanda Valencia Flores*

- A) Attacks Perpetrated within Council Borders by Active Terrorist cells.
- B) Racial Crimes Committed against European Ethnic Minorities.

### **League of Arab States**

*President: Moisés Romero Guzmán*

- A) Needed Actions to Enhance Public Security due to Transgressions by Extremist Paramilitary Groups in the Arab Region.
- B) Course of Actions Towards the Reduction of Oil and Gas Dependence on Persian Gulf Countries with Oil Based Economies.

### **North Atlantic Treaty Organization**

*President: Iván Gilberto Martín Enciso*

- A) Consequences of ISAF's Withdrawal from the Islamic Republic of Afghanistan in 2014 after the Country's Democratic Elections.
- B) NATO-Russian Federation Plans in order to Achieve Peace in Middle East with Special focus in the Islamic Republic of Afghanistan, the Islamic Republic of Iran and the Syrian Arab Republic.

### **Security Council**

*President: Emiliano Reyes Pardo*

- A) Violations of the International Humanitarian Law by Seleka Elements within the Central African Republic.
- B) Peace Implementation in Liberia following their Civil Conflict regarding the Influence of the United Nations Mission in Liberia

### **Weapons of Mass Destruction Commission**

*President: Emilio González Rentería*

- A) Possible Nuclear Breakout regarding Iran's Nuclear Fuel Facilities.
- B) Course of Action towards the Control of Improvised Nuclear Devices and their Assembly by Terrorist Groups.

### **International Court of Justice**

*President: Marco Antonio Casas Moreno*

- A) Jurisdictional Immunity of the State regarding Post World War II Proceedings (Germany vs Italy).
- B) Belgian Arrest Warrant of April 2000 (Democratic Republic of Congo vs Belgium).



## Topic A: Possible nuclear breakout regarding Iran's nuclear fuel facilities

One of the most persistent matters regarding the Nonproliferation Regime refers to Iran's Nuclear Fuel Cycle Facilities (Hereinafter referred to as "Nuclear Facilities") mostly located in Tehran. Iran's effort to acquire a nuclear weapons capability is the most pressing nuclear proliferation threat today. Unlike North Korea, which has already built nuclear weapons, Iran is still probably a few years away from being able to produce sufficient fissile material for a nuclear weapon. This paper reviews diplomatic efforts since 2002 to respond to Iran's nuclear challenge and evaluates options for reviving and strengthening these efforts in the future. Military options to pressure Iran or destroy its nuclear facilities are not addressed, although such options are bound to receive more serious consideration if diplomatic efforts fail.

Iran's nuclear program has clearly evolved since its establishment in 1957 as the Tehran Nuclear Research Center with the cooperation of the United States of America under the Atoms for Peace Program. This first establishment operated with Highly Enriched Uranium (hereinafter "*HEU*"), fuel provided by the United States of America under a "proposed agreement for cooperation in research in the peaceful uses of atomic energy". Iran had taken part in the signing and ratification of the Treaty on the Non-Proliferation of Nuclear Weapons (*NPT*) which aims to control nuclear weapons and weapons technology, to protect the right of using this technology with a peaceful goal and to achieve the non-proliferation and nuclear disarmament. The *NPT* established that the International Atomic Energy Agency (Further referred to as "*IAEA*") would verify the nuclear research and nuclear program developed by the Atomic Energy Organization of Iran (*AEOI*).

Ever since 1974, multiple deals regarding power reactors were signed with countries such as Germany; furthermore, several reactors were built in order to develop technologies such as Laser Enrichment and Plutonium Reprocessing capabilities. Nevertheless, after the 1979 revolution in which the American influence on Iran was diminished and condemned by Iran's new leader, Ayatollah Ruhollah Khomeini, all diplomatic and relations regarding such programs –including negotiations and cooperation on the nuclear subject–, were finished and Iran's nuclear program was suspended.

The gap the nuclear program withheld ended in 1985 in order to – according to Iranian authorities– "ensure the security of the country" by developing weapons to have an appropriate response in case of any attacks from other countries; presumably the United States and Israel.

After reinstating the nuclear program Iran has been target of speculations about secretive programs of nuclear research and development not reported to the IAEA. Measures were taken by the EU-3, composed of the French Republic, the Republic of Germany and the United Kingdom of Great Britain and Northern Ireland. One of these measures was the suspension of uranium-related activities, additionally Iran was exhorted to let the IAEA carry out meticulous inspections in the country's research centers. In 2006,





the Atomic Energy Organization of Iran (AEOI) refused to stick to the Treaty on the Non-Proliferation of Nuclear Weapons previously signed as well as to letting the IAEA enter to their facilities.

Consequently to the ineffective efforts of the EU-3 and the United States to establish diplomatic negotiations with Iran, in 2008, the existence of Iranian facilities secretly constructed underground was made apparent. The secret nuclear fuel cycle program, which began in the mid-1980s, was publicly disclosed in August 2002, when an Iranian opposition group, The National Council of Resistance of Iran, released details on two undeclared nuclear facilities and information on front companies involved in purchasing materials and equipment for Iran's nuclear program. In early 2003, as coalition forces mobilized for an invasion of Iraq, Iran sought to provide assurances to reduce international suspicions of its nuclear program.

On February 9, 2003, Iranian President Mohammed Khatami announced that the Natanz facility was intended to produce low enriched uranium fuel for Iran's planned nuclear power plants and denied that the facility had any military purpose. To reinforce the point, Iran invited IAEA Director General Mohammed El Baradei to visit the Natanz facility in late February, promising to submit the facility to IAEA inspections and to consider adopting the Additional Protocol to allow for more intrusive IAEA inspections. These facilities, however, held the potential to construct and develop uranium bombs.

In February (2004), the IAEA reported that Iran's earlier 'complete' declaration of past activities had failed to provide information on Iran's earlier research on advanced P-2 centrifuge designs and experiments with Polonium-210, which can be used to initiate nuclear explosions. The IAEA also reported that Iran failed to provide timely access to sites suspected of involvement in nuclear research, including a facility that was razed to the ground before IAEA inspectors gained access to the site.

The IAEA Board adopted a resolution on September 13, 2004, which called on Iran to restore the full suspension of its enrichment program, as a 'confidence building measure', and implicitly threatened to report Iran to the Security Council if it did not accede to the Board's request by the time of the next Board meeting on November 25.

If Iran did not agree to implement and maintain this suspension indefinitely, pending the negotiation of a permanent agreement, the EU-3 non-paper said they would support a resolution at the November 25, 2004 IAEA Board meeting, reporting Iran's past non-compliance with its NPT safeguards obligations and its failure to respond positively to requests of successive IAEA Board resolutions calling for a suspension of enrichment and reprocessing activities as a confidence building measure. In the event that Iran agreed to the suspension, however, negotiations with the EU-3 for a long-term agreement would begin immediately.



There is broad consensus in the Western group (the US, Europe, Canada, Japan, Australia, etc.) that a diplomatic agreement with Iran on the nuclear issue should include both enhanced IAEA inspections of Iran's nuclear facilities under the Additional Protocol and additional constraints on Iran's nuclear activities, specifically a ban on the development of fuel cycle technologies. In contrast, Iran's preferred outcome appears to be completion of its fuel cycle facilities, beginning with the Natanz enrichment plant, while implementing IAEA safeguards and the Additional Protocol.

The immediate issue, then, is whether any combination of international incentives and threats are sufficient to persuade Tehran to voluntarily forgo development of its enrichment and reprocessing capability. On balance, the historical record is not encouraging. Tehran appears to have a long-term motivation to achieve a nuclear weapons capability, having first started a secret gas centrifuge enrichment program in 1985, and Iran is probably only a few years away from completing a production scale enrichment plant at Natanz. Iran's desire to acquire a nuclear weapons capability appears to be motivated by a profound sense that a nuclear weapons capability is necessary to reinforce what Iran sees as its natural dominance in the region; an uproar, this revelation led to economic sanctions to Iran by the United Nations, the United States and the European Union between 2008 and 2010. The sanctions agreed...:

- ...to block the trade of nuclear materials to Iran.
- ...to block the lend of money from any financial institution to Iran.
- ...to block the American investment in Iran and forbid the trade between these two countries.
- ...to expel Iranian banks from global electronic systems, which would lead to blocking Iran from international trade.

Although the sanctions imposed; the Atomic Energy Organization of Iran (AEOI) has continued in the development of potential nuclear weapons. As specified by Gary Samore, member of the International Institute for Strategic Studies:

*Whether Iran has already made a political decision to produce nuclear weapons is unknown, but there is little doubt that Tehran sees the development of enrichment and reprocessing facilities as creating an option for acquiring nuclear weapons, if circumstances warrant.*

These Enrichment Plants have two ways of relaying their consequential Low Enriched Uranium (Further referred as "LEU"), material harder to obtain than HEU and used to build INDs. The first, and the less promising one is that they send the LEU to secret facilities where they will be used for the fabrication of Lethal or Incapacitating Chemical Weapons or Nuclear Devices. The second one, and the core of what the WMDC aims to avoid is that under Article X of the NPT, Iran will give a 90 days notice and withdraw its connections with the treaty, employing these materials for the production of





Weapons Grade Uranium, lacking the inspection of the International Atomic Energy Agency (Hereinafter referred to as “the IAEA”) and leaving a scar in the Nonproliferation Regime Initiative.

Its importance raises as Mining Facilities such as the Saghand Mine –located in Yazd, central Iran– represent roughly 1,000 tons of uranium. Not only that, but reports say that mining started recently, April 9, 2013, to be exact. This raises a new question: How far is this problem from becoming a nuclear catastrophe? In addition, we have the Ardakan Yellowcake Production Plant, Gchine Mine and Mill, and many more mining facilities that position Iran in a sensitive spot; said spot is to be considered by the Committee. According to the International Atomic Energy Agency, 100 incidents of theft and other unauthorized activities involving nuclear and radioactive material are reported to the organization every year.

By November the 24th, 2013, the Obama administration, along with Iran and other international negotiators at Geneva, established a meeting on January the 20th, 2014. This meeting is set to achieve further negotiations regarding the so called “Joint Plan of Action” that specifies, “ in terse language the steps Iran would initially take to constrain its nuclear effort, and the financial relief it would get from the United States and its partners”(R. Gordon ).

Before the agreement can take place, however, the meeting on the 20th will sort out “ambiguities” concerning the International Atomic Energy Agency (IAEA). Still, Iran is already expected to stop enriching uranium beyond 5 percent. Therefore, Iran’s HEU levels would be efficient for energy production but not enough for the manufacturing of bombs or nuclear devices that could pose a significant threat to other countries. Israel, ally of the United States, remains negative on the resolution due to the country’s high suspicion of Iran’s nuclear production.

Reports by The New York Times state that “Iran’s stockpile of uranium enriched to 20 percent would be diluted or converted to oxide so that it could not be readily used for military purposes” (R. Gordon, and Thomas Erdbrink ). In 1991, the amount of countries in the world that held considerable capacity to create bombs via nuclear-fuel was 52. In the last two years, a total of seven countries gave up on an important amount of uranium and plutonium, bringing that number, along with the decrease caused by time to an outstanding 25. In accordance to this agreement, Iran has already started dismantling some of the infrastructure required to enrich the quantity of uranium needed for nuclear bombs and such. In return, the United States and the international negotiators at Geneva provided Iran with billions of dollars in “relief” of from economic sanctions previously established. It is expected by the United States Government for Iran to follow the example of countries such as Mexico, Austria, the Czech Republic, Sweden, Ukraine, Vietnam, and Hungary, which effectively gave up most of their nuclear material.



Negotiations with Iran in the future are looking “difficult”, a word used to describe the negotiations on a follow-up agreement in a statement issued in Paris, by Secretary of State John Kerry. Iran’s president, Hassan Rouhani, stated in January the 9th that negotiations were a blessing, “the hostility of America toward Iran, Iranians and Islam had become clear to everyone”. Meanwhile, the Obama administration said, at conference in December held by the Saban Center for Middle East Policy, that there was “no more than a 50-50 chance of achieving a more comprehensive follow-up accord”.

Parallel to this, Iran's official news media reported that Ayatollah Ali Khamenei, has criticized the United States as an hypocritical country in human rights matter; he also criticized the issue of the military prison at Guantánamo Bay, Cuba, which was promised to be closed by President Barack Obama.

The issue relies on Iran’s goal to achieve an industrial scale producement of uranium while other countries thrive for Iran to aim for a low, small and very limited scale. What, however, guarantees Iran’s intentions? And on the other hand, what justifies other countries’ claims? Analysts indicate that although the United States is to provide money to Iran, the ayatollah’s goal is to make it clear to his people that Iran’s worst enemy is potentially still the United States.

### References:

ISIS, . "Nuclear Sites." . ISIS: Nuclear Iran. Web. 1 Feb 2014.  
<<http://www.isisnucleariran.org/sites/detail/uranium-mining/>>.

Samore, Gary. "Meeting Iran’s Nuclear Challenge." . The United Nations. Web. 1 Feb 2014. <<http://www.blixassociates.com/wp-content/uploads/2011/03/No21.pdf>>.

R. Gordon, Michael. "Longer-Term Deal With Iran Faces Major Challenges." New York Times [London] 24 Nov 2013, n. pag. Web. 12 Jan. 2014.  
<<http://www.nytimes.com/2013/11/25/world/middleeast/officials-say-the-toughest-work-on-irans-nuclear-program-still-lies-ahead.html>>.

R. Gordon, Michael, and Thomas Erdbrink. "Details Agreed on Nuclear Deal With Iran, Set to Start Jan. 20." New York Times [Paris] 12 January 2014, n. pag. Web. 12 Jan. 2014.  
<[http://www.nytimes.com/2014/01/13/world/middleeast/iran-nuclear-deal.html?ref=nuclearprogram&\\_r=0](http://www.nytimes.com/2014/01/13/world/middleeast/iran-nuclear-deal.html?ref=nuclearprogram&_r=0)>.



## Topic B: Course of Action regarding the Control of Improvised Nuclear Devices and their Assembly by Terrorist Groups

Nuclear armament and its illegal movement inside the black market is indeed a topic that concerns the *WMDC*, however, during the past decade, studies about the illegal acquisition of nuclear weapons have yielded surprising results. It is known that terrorist groups that resort to nuclear artillery have found another way of obtaining such weapons: the fabrication of Improvised Nuclear Devices (further referred to as "*IND*"). The handling of such methods has recently increased. These *IND* are nuclear weapons made of fissile material gained by easily processing Highly Enriched Uranium (Hereinafter referred to as "*HEU*") and Plutonium. *HEU* is effortlessly obtained from Uranium Mines, and considering the economical and influential extent of current Terrorist Groups it is apparent that both the acquisition and processing of such materials pose no adversity to said Terrorist Groups.

Deeply concerned about the illegal trade of Nuclear and Biological Weapons, but also aware of the manufacture of crude weapons of mass destruction, the *WMDC* actively looks for a well-thought-out plan that can prevent not only the illegal trade of weapons but also the illicit purchase or extraction of *HEU* and the abuse of Plutonium.

*INDs* , must not be taken lightly, for they produce the same results as nuclear weapon explosions. Affecting both human integrity and governmental infrastructure. Among the various medical consequences we can categorize physical effects as follows:

Blast Injury, which can be identified as: \*

- Immediate effects of blasts and explosions
  - Primary blast injury — direct effects result from overpressurization and under-pressurization. These commonly affect air-filled organs and air-fluid interface.
    - Rupture of tympanic membranes: Ear drum injury
    - Pulmonary damage
    - Hollow Viscus Injuries (injuries that affect hollow body organs)
  - Secondary blast injury
    - Penetrating trauma
    - Fragmentation injuries
  - Tertiary blast injury — effects of structural collapse and of persons being thrown by the blast wind
    - Crush injuries and blunt trauma
    - Penetrating or blunt trauma
    - Fractures and traumatic amputations
    - Open or closed brain injuries
  - Quaternary blast injury — burns, asphyxia, and exposure to toxic inhalants

### *Blast injury classification*

\*last update, Aug302013\*, see " Nuclear Detonation: Weapons, Improvised Nuclear Devices"  
<http://www.remm.nlm.gov/nuclearexplosion.htm> ("Nuclear Detonation: Weapons, Improvised Nuclear Devices")

- Types of injuries caused by blasts depend on whether blasts



- Occur outdoor in open air or within buildings
- Cause the collapse of a building or other structure
- Conventional bombs generate blast waves that spread out from a point source
  - Blast wave consists of two parts
    - Shock wave of high pressure followed by
    - Blast wind or air in motion
  - Damage produced by blast waves decrease exponentially with distance from the point source
  - Reverberations occur off walls and rigid objects
  - As outward energy dissipates, a reversal of wind back toward the blast and under-pressurization occur
  - The resulting pressure effect damages organs, particularly at air-fluid interfaces, and the wind propels fragments and people, causing penetrating or blunt injuries
- Enhanced-blast explosive devices (e.g., nuclear explosions) have more damaging effects than conventional explosions
  - Primary blast disseminates the explosive and then triggers it to cause a secondary explosion
  - High pressure wave then radiates from much larger area, prolonging the duration of the over-pressurization phase and increasing the total energy transmitted by the explosion
  - Cause a greater proportion of primary blast injuries than do conventional devices.

*Blast injury classification (cont.)*

- Thermal/Burn injury, which can be identified as : \*

- Direct absorption of thermal energy through exposed skin, heating or ignition of clothing (flash burns)
- Indirect action of fires caused in the environment (flame burns)
- Burn casualties — and it is expected there would be many — may result from the absorption of thermal radiation energy.
- Eye injuries:
  - Flash blindness
    - Caused by the effect on the retina of the initial brilliant flash of light produced by the explosion
    - Victims DO NOT have to be looking at the detonation site, as reflected/diffracted light is sufficient in many cases
    - Victims driving at the time of the event will be unable to see, potentially causing large numbers of traffic accidents
    - During daylight, flash blindness does not persist for greater than about 2 minutes, but lasts generally seconds
    - At night, when the pupil is dilated, flash blindness will last longer
    - Partial recovery may be expected within 3-10 minutes in daylight, longer at night
  - Retinal scarring
    - Retinal burn that can result in permanent damage from scarring results when a fireball is directly viewed
    - May be sustained at considerable distances from the explosion, depending on blast size
    - Central scarring will cause greater disability

*Thermal/burn injury classification*

\*last update, Aug302013\*, see " Nuclear Detonation: Weapons, Improvised Nuclear Devices" <http://www.remm.nlm.gov/nuclearexplosion.htm>  
 ("Nuclear Detonation: Weapons, Improvised Nuclear Devices")

- Radiation injury, which can be identified as: \*



- During the incident
  - Prompt radiation
    - Gamma and neutron radiation exposure dose received within the first minutes after detonation
    - Depending on the dose, patients are at risk for Acute Radiation Syndrome
  - Delayed radiation
    - Fallout: Produced by fission products and neutron-induced radionuclides in surrounding materials (water, soil, structures, nuclear device debris)
    - These radioactive products will be dispersed downwind with the fireball/debris cloud
    - As the cloud travels downwind, the cooling and falling radioactive material settles on the ground, creating a large swath of deposited material
    - The highest concentrations (creating the most dangerous radiation levels) fall closest to the detonation site
    - The fallout creates large areas of contamination, and the ionizing radiation coming off the fallout contamination damages tissue and can penetrate through thin walls and glass
    - Three ways victims can get a dose of radiation from the fallout:
      1. Radiation directly from the fallout as it passes by or from the fallout that has been deposited on the ground
      2. Radiation from fallout contamination on skin, clothing, or possessions, which exposes people until they change their clothing and/or remove the contaminated material
      3. Ingestion or inhalation of radioactive material
    - Of these, the most likely to cause injury in the first few days is direct exposure to fallout, which can be protected against using the three basic principles of time, distance, and shielding
    - Exposure to fallout is the most dangerous in the first few hours
    - Fallout decays rapidly with time:
      - Example from a hypothetical 10 Kt explosion:
        - After 3 hours, initial exposure rates are down to 20%
        - 8 hours, down to 10%
        - 48 hours, down to 1%
      - Therefore, sheltering for the first few hours can save lives
- Long after the incident (potential long-term effects of radiation)
  - Delayed effects of acute radiation exposure
  - Specific organ effects depending on where a given isotope is incorporated
  - Carcinogenesis
  - Mutagenesis (fetal effects)

### *Radiation injury classification*

\*last update, Aug302013\*, see " Nuclear Detonation: Weapons, Improvised Nuclear Devices" <http://www.remm.nlm.gov/nuclearexplosion.htm>  
 ("Nuclear Detonation: Weapons, Improvised Nuclear Devices")

Supposedly,, successful *INDs* have yields equivalent to 10, 000 to 20,000 tons of TNT (10-20 kilotons), which bears comparison to the bomb from the Nagasaki incident. It is to be taken into account, that fire and radiation damage would also cover a large area, even wider than the explosion radius, whereas a simple nuclear yield of a few tons could potentially take down –"under certain circumstances"– a number of skyscrapers, it is not hard to imagine the number of casualties and widespread contamination that would result from a successful *IND*.

By addressing these effects the *WMDC* recognizes that *INDs* pose as much of a threat as any other Nuclear Weapon. Thus, we draw attention to the correct utilization of Nuclear Energy. As stated by the Non-Proliferation Treaty (further referred to as "the NPT") it is important to note the inalienable right of each Party involved in the treaty to research and invest on the development of nuclear energy and its application in favor of human development. Also, as the United Nations Office at Geneva (Hereinafter, "Office at



Geneva”) has pointed out, the fine line that used to divide biology and chemistry has almost disappeared. The same can be said regarding the branches of chemical engineering and nuclear development. The facts point to the convergence of scientific development and the inevitable progress of the humane.

Notable examples include the Y-12 Naval Reactors Program, which aims to utilize part of the United States of America Y-12 National Security Complex’s *HEU* for Naval Nuclear Propulsion. But even if these fissile materials serve another purpose than that of Nuclear Weapons, the Commission is not certain that such programs will eradicate the abuse of *HEU* or Plutonium. Even though, in this case, such materials as well as the United States of America’s nuclear arsenal have been legitimized by the *NPT* it is still hard to keep track of the amounts produced by the Nuclear-Weapon States (hereinafter *NWS*) formed by China, France, Russia, United Kingdom, and the United States of America. With this in mind, it is natural for the regulatory procedures to be quite difficult in other countries –especially those that do not abide by the *NPT*’s articles, such as India, Israel and Pakistan.

According to the United Nations Organization the “estimated military stocks of

<i>Country</i>	<i>Military plutonium, MT</i>	<i>Military HEU, MT of weapons-grade uranium equivalent</i>
Russia	130	970
United States	100	635
France	5	24
China	4	20
United Kingdom	7.6	15
Israel	0.51	not known
India	0.310	small quantity
Pakistan	0.005	0.690
North Korea	0.003-0.004	not known
South Africa	None	0.4

fissile material, end of 1999” are:

*courtesy of the United Nations Weapons of Mass Destruction Commission*

Regarding the Nuclear Capability of the *NWS*, rough estimates concerning Warheads and Lower-Yield Devices are –according to the Arms Control Association– as follows:





**China:** Approximately 240 total warheads.

**France:** Fewer than 300 operational warheads.

**Russia:** Roughly 1,480 deployed strategic warheads. The Federation of American Scientists estimates Russia has another 1,022 nondeployed strategic warheads and approximately 2,000 tactical nuclear warheads. Additional thousands are awaiting dismantlement.

**United Kingdom:** Fewer than 160 deployed strategic warheads, total stockpile of up to 225.

**United States:** Approximately 5,113 nuclear warheads, including tactical, strategic, and nondeployed weapons. According to the latest official New START declaration, the United States deploys 1,654 strategic nuclear warheads on 792 deployed ICBMs [Inter-Continental Ballistic Missiles], SLBMs [Submarine-Launched Ballistic Missile], and strategic bombers. The Federation of American Scientists estimates that the United States' nondeployed strategic arsenal is approximately 2,800 warheads and the U.S. tactical nuclear arsenal numbers 500 warheads. Additional warheads are retired and await dismantlement.

As for India, Israel and Pakistan, based on their production of fissile materials – Plutonium for India and Israel; HEU for Pakistan– the Arms Control Association has assessed these states' estimated amount of warheads as follows:

**India:** Up to 100 nuclear warheads.

**Israel:** Between 75 to 200 nuclear warheads.

**Pakistan:** Between 90 to 110 nuclear warheads.

Furthermore, a close watch must be kept on Iran, North Korea and Syria, countries that are considered as an “Immediate Proliferation Concern”:

In 2003, the Atomic Energy Agency concluded that, although Iran does not possess enough fissile material to pose a nuclear threat, it had assumed surreptitious nuclear activities in order to establish indigenous fissile material production capacity.

As for North Korea: in August 2013, the country's Heavy-Water Reactor –used to extract Plutonium– was restarted. It is a matter of high priority to have such implications in mind.

Referencing Syria, the International Atomic Energy Agency provided records that indicate failed attempts from Syria to explain traces of “undeclared man made uranium particles” found on the ruins of an alleged construction site of a nuclear research reactor after an airstrike commanded by Iran forces.

Although the data mentioned reflects “official” statistics provided by specific



Studies made to –and by– governmental appendages it is our top priority to discuss the fact that there may be many more unregistered mining facilities dedicated to the extraction of fissile material, whether for nuclear research or the development of nuclear armament.

In addition, these unregistered and unofficial mining facilities contribute to the illegal handling of fissile materials. Terrorist groups are thought to have access to such material *via* these facilities. Although *de iure*, financing a terrorist group is unacceptable, the Commission can not disregard the probability of such illicit actions occurring.

Reassuringly though, it is important to note that it is likely that most terrorist groups will not pursue the utilization of *INDs* due to technical and financial points, however, nationalist/separatist groups might find it profitable and advantageous. Their aim would probably be international recognition, blackmailing adversary governments, and in the case of extremist factions, massive destruction.

According to United Nations documents: the complexity of building *INDs* is

[...] much greater than the technical demands of making an improvised explosive device (IED) – a conventional bomb, it is likely that the technical barriers alone would dissuade most terrorists from pursuing an improvised nuclear device....

Nevertheless, a gun-type *IND* could be considered within the reaches of certain terrorist groups.

Another requirement for the production and deployment of *INDs* is undoubtedly money. Millions of dollars would likely be needed to purchase fissile materials, bribe government officials, threat government officials or security forces in charge of protecting fissile materials, or for stealing such materials from processing or storage sites. Although planning an operation like this may take months, the actual fabrication of an *IND* could take days or even less. In order to shorten the time of assembly of an *IND* the terrorist faction would require a team of specialists in nuclear physics and/or engineering, machining, metallurgy, and great knowledge in conventional explosives. This team would roughly consist of less than three members and their willingness to contribute to such project would also be a factor, although a lesser one, for coerciveness and the use of threats and/or blackmail is distinct of such paramilitary terrorist factions.

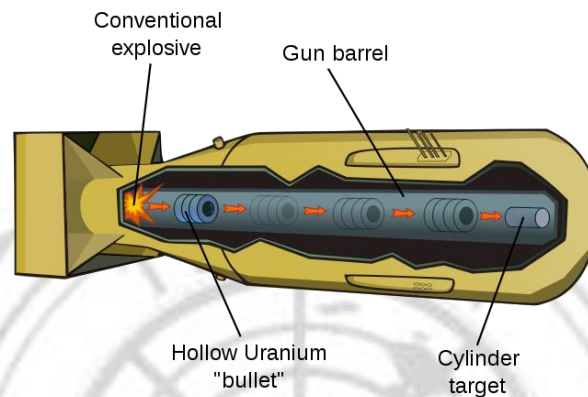
Positively, in order to build any type of *IND* a vast amount of fissile material is required, therefore, it becomes easier to track the theft of these materials. These materials would be required in a certain form so that the terrorist group has an easier time handling the elaboration of an *IND*. This means that whatever a terrorist group is planning, the state in which the material is would have already been contemplated; hence, the processing and





production of the device would take a premeditated amount of time.

However, simple *INDs* such as Gun-Type device would not require as much technical knowledge or planning as a regular *IND* would. A Gun-Type Improvised Nuclear Device would require the acquisition of *HEU* which would be the hardest part of its creation, rather than the actual process of assembly. A Gun-Type Fission Weapon (gun-type *IND*) would still produce catastrophic results, such as the one used in the Hiroshima incident, codenamed: "Little Boy".



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## Operative Clauses

- Accepts
- Affirms
- Approves
- Authorizes
- Calls
- Calls upon
- Condemns
- Congratulates
- Considers
- Deplores
- Designates
- Emphasizes
- Encourages
- Expresses in appreciation
- Further proclaims
- Further recommends
- Further requests
- Further resolves
- Notes
- Proclaims
- Reaffirms
- Recommends
- Regrets
- Resolves
- Solemnly affirms
- Strongly condemns
- Supports
- Urges

## Preambulatory clauses

- Affirming
- Alarmed by
- Approving
- Aware of
- Conscious of
- Confident
- Contemplating
- Deeply concerned
- Deeply disturbed
- Desiring
- Emphasizing
- Expressing its appreciation
- Expressing its satisfaction
- Fully aware
- Alarmed
- Further recalling
- Guided by
- Having adopted
- Having considered
- Having examined
- Having studied
- Keeping in mind
- Noting
- Reaffirming
- Realizing
- Welcoming
- Having Heard
- Believing

