



## **DISARMAMENT & INTERNATIONAL SECURITY COMMITTEE (DISEC)**

**“Promoting Nuclear Non-Proliferation in Africa”**

**Study Guide**

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## 1. Welcoming Letter

Honorable delegates of the DISEC committee,

We are Stefania and Eleni and for this year we will be the Board of your committee. Stefania is a 4th year student in Law faculty of Aristotle University of Thessaloniki. Also Eleni is a 17-year old student in high school.

It is our utmost and sincere pleasure to welcome each and every one of you in the Disarmament and International Committee (1st GA committee DISEC)! Firstly we would like to congratulate you all for participating in the 18th edition of ARCMUN. Through this valuable experience you will get the opportunity to broaden your academic horizons by enhancing your negotiating, debating, and public speaking skills, as well as gain a deeper insight into how the United Nations (UN) actually functions.

We guarantee to do our best and we are sure that you will do exactly the same. Our goal is to facilitate you during our sessions and be part of an amazing and unforgettable experience with fruitful debates, as well as productive cooperation. Our topic we will be discussing this year is the Nuclear Non-Proliferation in Africa.

To guide you in the best possible way about our topic of discussion, we have prepared and oriented this Study Guide to facilitate your research and your participation in the conference. We highly recommend you to conduct a thorough examination of your country's stance concerning the matter discussed and also elaborate on your key national policies within the context of the position paper. Moreover it is very helpful for you to focus on the points to be addressed.

Good preparation, eagerness for further research, and the will for cooperation are considered stepping stones to a successful committee outcome. We would like to thank you in advance for your collaboration. We are looking forward to meeting all of you in March.

Best regards,

Stefania Zourka Main Chair

Eleni Karakana Co-Chair

## 2. Introduction to the Committee

The Disarmament and International Security Committee (DISEC) was established in 1945 and comprises one of the main committees of the General Assembly<sup>1</sup>. The role of DISEC is described in Article 11, Chapter IV of the United Nations Charter: “The General Assembly may consider the general principles of cooperation in the maintenance of international peace and security, including the principles governing disarmament and the regulation of armaments and may make recommendations with regard to such principle to the Members or to the Security Council or both”<sup>2</sup>. As for article 11, the mandate of DISEC as a committee of the General Assembly can be presented as, to promote the establishment and maintenance of international peace and security with the least diversion for armaments of the world’s human and economic resources, after its reform in 1993<sup>34</sup>. The committee’s responsibilities are spinning around issues of disarmament, global challenges and threats to peace, all of which imminently affect the international community. DISEC further searches for solutions to the challenges the stability of international security faces. Any disarmament and international security matter that appears in international stage, falls within the mandate of the Charter relating to the powers of the DISEC Committee<sup>5</sup>.

## 3. Introduction to the Topic

The exceptional and remarkable human technological achievements are likely to take humanity one step further. However, it would cause serious problems when it is left uncontrolled. The nuclear<sup>6</sup> proliferation is one of those scientific and technological achievements, which caused major concerns to the International community that has

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<sup>1</sup> Un.org. (2019). UN General Assembly - Functions and Powers of the General Assembly. [online] Available at: <http://www.un.org/ga/about/background.shtml> [Accessed 4 Oct. 2019].

<sup>2</sup> Hrlibrary.umn.edu. (2019). Charter of the United Nations: Chapter IV the General Assembly. [online] Available at: <http://hrlibrary.umn.edu/peace/docs/chapter4.html> [Accessed 4 Oct. 2019].

<sup>3</sup> Un.org. (2019). Chapter IV. [online] Available at: <http://www.un.org/en/sections/un-charter/chapteriv/index.htm1> [Accessed 4 Oct. 2019].

<sup>4</sup> Un.org. (2019). UN General Assembly - First Committee - Disarmament and International Security. [online] Available at: <http://www.un.org/en/ga/first/> [Accessed 4 Oct. 2019].

<sup>5</sup> Ibid

<sup>6</sup> Kenneth Waltz, *The Spread of Nuclear Weapons: More May Better* (London: Adelphi Papers, 1981)

decided to promote and reflect its policies the nuclear non-proliferation. The idea of nuclear non-proliferation is generally introduced in the context of safe and reliable use of the benefits of nuclear energy. The importance of our focus point in the continent of Africa lies accurately because of the multidimensional issues that Africa has to deal with, in addition to the fact that in a worldwide level the majority of African States, except for South Sudan, has taken steps and efforts to prevent nuclear weapons from escalation. Thus, it is important to examine the current situation of the non-proliferation regime, which was created by the International community, to enlighten the aspects of the misuse of nuclear technology in the area by governmental, or non-governmental actors, and to review the sustainability of the current framework, without refusing the affirmatives of the benefits of nuclear applications.

#### 4. Definition of Key Terms

**Nuclear weapons:** Nuclear weapon, device designed to unharness energy in Associate in Nursing explosive manner as a results of nuclear reaction, nuclear reaction, or a mixture of the 2 processes. Fission weapons are unremarkably mentioned as atomic bombs. Fusion weapons are mentioned as atomic bombs or, a lot of unremarkably, element bombs; they're sometimes outlined as nuclear weapons during which a minimum of a little of the energy is discharged by nuclear reaction<sup>7</sup>. Nuclear weapons are those used in the bombings of Hiroshima and Nagasaki in 1945. They have only been used twice in war<sup>8</sup>.

**Denuclearization:** There is no universally agreed definition of denuclearization. However, official global conditions generally characterize denuclearization as "the process of reducing the quantity and capability of military and military weapons"<sup>9</sup>. Denuclearization can be defined as the act of reducing or abolishing nuclear weapons. It is even attributed

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<sup>7</sup> Encyclopedia Britannica. (2019). *nuclear weapon / History, Facts, Types, & Effects*. [online] Available at: <https://www.britannica.com/technology/nuclear-weapon> [Accessed 13 Oct. 2019].

<sup>8</sup> Un.org. (2019). *Nuclear Weapons – UNODA*. [online] Available at: <https://www.un.org/disarmament/wmd/nuclear/> [Accessed 4 Oct. 2019].

<sup>9</sup> Pnnl.gov. (2019). [online] Available at: [https://www.pnnl.gov/main/publications/external/technical\\_reports/PNNL-22092.pdf](https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-22092.pdf) [Accessed 4 Oct. 2019].

to the elimination of military infrastructure and materials needed for the production of nuclear weapons.

**Dual use of nuclear technology:** Dual-use items are software and technology that can be used for both civilian and military purposes. It is the responsibility of the European Union to have full control over the export, transportation and brokering of dual-use goods, so that it can contribute to international peace and security in order to stop and prevent the proliferation of nuclear weapons<sup>10</sup>.

**Nuclear terrorism:** Nuclear terrorism is a criminal offense committed by a person unlawfully and intentionally when he "uses in any way radioactive material intended to cause death or serious bodily injury." It may also be intended to cause significant damage to the environment. Forcing may also be to force a natural or legal person, an international organization or a state to perform or abstain from an act. The above are in accordance with the United Nations International Convention on the Suppression of Nuclear Terrorism Acts 2005<sup>11</sup>

## 5. History of the Topic

As it is clearly mentioned above, humanity is capable of elaborating in its own scientific technological achievements, in the context of progress, thus, it is crucial to understand fear

and concerns that could possibly accompany is proliferation, when it comes up to be uncontrolled. Nuclear energy's first appearance was linked with devastating consequences for humanity in addition to the end of the World War II. Its military use, in August 1945, was about the US intervention in Japan, with the release of two atomic bombs, which were consisted of uranium-235 and plutonium-239, in Hiroshima and

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<sup>10</sup>Ec.europa.eu. (2019). *Dual-use trade controls - Trade - European Commission*. [online] Available at: [https://ec.europa.eu/trade/import-and-export-rules/export-from-eu/dual-use-controls/?fbclid=IwAR3c8f0tn\\_SEJ\\_1nJsAbrJPUCF6L4OAF6GCb-rRHZqYg9\\_vPx1HcYo3i8uQ](https://ec.europa.eu/trade/import-and-export-rules/export-from-eu/dual-use-controls/?fbclid=IwAR3c8f0tn_SEJ_1nJsAbrJPUCF6L4OAF6GCb-rRHZqYg9_vPx1HcYo3i8uQ) [Accessed 5 Oct. 2019].

<sup>11</sup>Treaties.un.org. (2019). [online] Available at: <https://treaties.un.org/doc/db/Terrorism/english-18-15.pdf> [Accessed 5 Oct. 2019].

Nagasaki<sup>12</sup>. It was exactly one of the turning points<sup>13</sup> of the international community's concerns about the need to promote disarmament, or at least, non proliferation of nuclear power, in order to prevent future possibilities of the unimaginable and cruel consequences. The Union of Soviet Socialist Republics (USSR) inevitably following the initiative of the USA, in 1949 tested and implemented the first explosive device. In the beginning of 1952 Great Britain came up with the first nuclear weapon. It was also developed in France in 1960 and in China in 1964. Surprisingly, in the beginning of 1960 it was generally assumed that the countries that had nuclear weapons under their possession, or were developing nuclear programmes (Australia, Egypt, Sweden, Switzerland), proportionately or not to their economic and technological development. The idea of the proliferation of nuclear use was spread all over the world as the only way for a country to expand its military power and to build a strong and efficient security system<sup>14</sup>. On the other hand, the extremely destructive power of nuclear energy, beyond the possibility of the beginning of new conflicts, would have devastating and unpredictable consequences not only for the maintenance of international peace and security, but also for the evolution of humanity itself. Consequently, it was inevitable for several states (non nuclear states) to refrain from developing their nuclear programmes<sup>15</sup> or to obtain more nuclear weapons or technical equipment. The Nuclear States, though, were unlikely to be obliged to abandon their mass productivity on nuclear materials. The lack of specific legal framework was actually strengthening their arguments in favour of continuing their activities. This was the general background in which the efforts for

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<sup>12</sup> Ctbto.org. (2012). *6 and 9 August 1945 Hiroshima / Nagasaki: CTBTO Preparatory Commission*. Available at: <https://www.ctbto.org/specials/testing-times/6-and-9-august-1945hiroshima-nagasaki>

<sup>13</sup> History.com. (2009). *Bombing of Hiroshima and Nagasaki*. Available at: <https://www.history.com/topics/world-war-ii/bombing-of-hiroshima-and-nagasaki>

<sup>14</sup> Kenneth Waltz, *The Spread of Nuclear Weapons: More May Better* (London: Adelphi Papers, 1981)

<sup>15</sup> Anon, (2018). *Safeguards to Prevent Nuclear Proliferation*. Available at: <https://www.world-nuclear.org/information-library/safety-and-security/non-proliferation/safeguards-to-prevent-nuclear-proliferation.aspx>

promoting nuclear non proliferation, that count more than 50 years of history. This history started by the appearance of the Treaty on Nuclear Proliferation (NPT)<sup>16</sup>, which will be analyzed further in the next sections of this study guide.

Especially under the light of our approach of the case of Africa and its nuclear past, it is remarkable to mention that it started through other countries' nuclear tests and explosions, such as the ones of France in parts of the Sahara desert, which consists of parts of Algeria (1960)<sup>17</sup>, because back then Algeria was a protectorate of France. Apart from the protests of some African States and the International community, France continued its activity. Between 1960 and 1980, South Africa started developing its nuclear programme. The decision was absolutely logical, as South Africa<sup>18</sup> is one of the world's



largest uranium resourced countries. During a small period of time South Africa achieved the possession of 6 nuclear bombs<sup>19</sup> (gun-type), and the development of nuclear based technologies<sup>20</sup>. However, voluntarily, it dismantled operationally its own creations and the highly developed nuclear

achievements, in the end of apartheid in 1990.<sup>21</sup> Let us mention that this non-proliferation decision was in the context of several internal political issues, the release of Nelson Mandela and the Namibia independence. Last but not least, it is highly important to underline that Africa is nowadays characterized as the largest Nuclear-Weapon-Free

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<sup>16</sup> Un.org. (n.d.). *Treaty on the Non-Proliferation of Nuclear Weapons (NPT)* – UNODA. Available at: <http://www.un.org/disarmament/wmd/nuclear/npt/text>

<sup>17</sup> News.bbc.co.uk. (1960). *BBC ON THIS DAY | 27 | 1960: France explodes third atomic bomb*. Available at: [http://news.bbc.co.uk/onthisday/hi/dates/stories/december/27/newsid\\_2985000/2985200.stm](http://news.bbc.co.uk/onthisday/hi/dates/stories/december/27/newsid_2985000/2985200.stm)

<sup>18</sup> Horton, Roy E. *Out of (South) Africa: Pretoria's Nuclear Weapons Experience*. Champaign, IL: University of Illinois, 2000

<sup>19</sup> Archive, W. (n.d.). *Wilson Center Digital Archive*. Digitalarchive.wilsoncenter.org. Available at: <https://digitalarchive.wilsoncenter.org/collection/95/south-african-nuclear-history>

<sup>20</sup> Fas.org. (n.d.). *BIRTH AND DEATH OF THE SOUTH AFRICAN NUCLEAR WEAPONS PROGRAMME*. Available at: <https://fas.org/nuke/guide/rsa/nuke/stumpf.htm>

<sup>21</sup> Atomic Heritage Foundation. (n.d.). *South African Nuclear Program*. Available at: <https://www.atomicheritage.org/history/south-african-nuclear-program>



Zone<sup>22</sup>. In what ways, through all the aforementioned historical timeline, Africa faces concerns and threats that need our attention and careful examination?

## 6. Legal Framework

The actual non proliferation regime was introduced to the international community by the agreement on the creation of a legal binding document, in the context of the commitments on non proliferation. The **Nuclear Proliferation Treaty (NPT)**<sup>23</sup> was initiated by the United Kingdom, the United States, the Soviet Union and was opened for signature in 1968 by 59 other States. It entered into force in 1970. The three countries that ratified the convention pledged not to contribute to the production or supply of other nuclear countries. It is referred as the main pillar of the efforts of aiming disarmament. The NPT defined the so called Nuclear Weapon States (NWS) and the non nuclear weapon States. Furthermore it stimulated obligations for member states proportionately, in order for them to abstain from the proliferation of their nuclear technology. Nowadays, there are 189 plus Taiwan Member States as parties of the Treaty. Although the NPT may have been liable for the slow progress that was noted in the fields of bilateral negotiations of Member States, it is generally accepted that it has been the main legal document that assures security and stability in its parties, the majority of which are developing or under developing countries. The greatest risk comes from countries that have not joined the NPT regime, as they remain uncontrolled, despite the fact that they are countries with existing (or not officially registered) nuclear programmes (India, Pakistan, Israel). The aspects of this unmonitored regime will be examined below (Discussion on the Topic) According to the International Atomic Energy Agency (IAEA), as far as African States are concerned, there are 33 African States<sup>24</sup> out of 189 of the Parties of the Treaty.

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<sup>22</sup> James Martin Center for Nonproliferation Studies. (2009). *African Nuclear-Weapon-Free Zone Enters into Force*. Available at: <https://www.nonproliferation.org/african-nuclear-weapon-free-zone-enters-into-force/>

<sup>23</sup> Legal.un.org. (1968). *Treaty on the Non-Proliferation of Nuclear Weapons - Main Page*. Available at: <http://legal.un.org/avl/ha/tnpt/tnpt.html>

<sup>24</sup> [www.iaea.org](http://www.iaea.org). (n.d.). *Developing Countries and the NPT*. Available at: [https://www.iaea.org/sites/default/files/223\\_403599194.pdf](https://www.iaea.org/sites/default/files/223_403599194.pdf)



*Photographs from the negotiations of the NPT Treaty (UN Headquarters, Washington DC)*

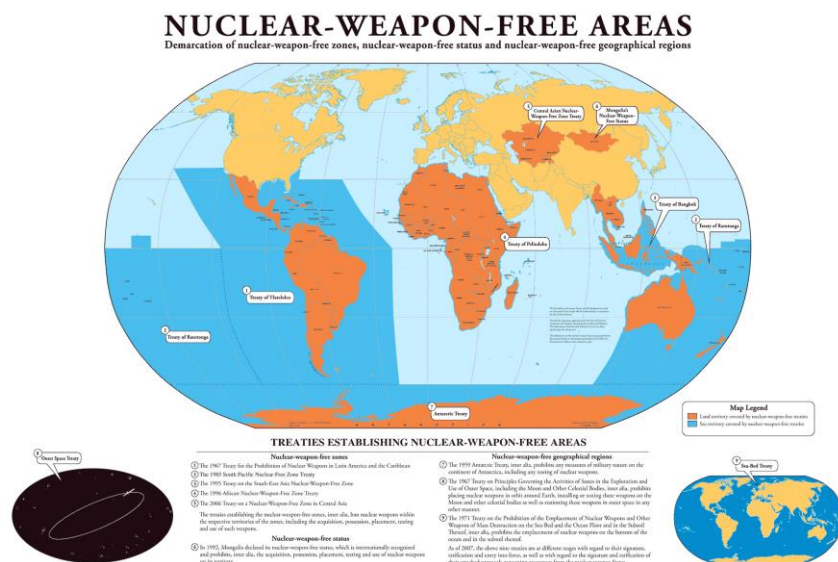
The African leaders have adopted, bearing in mind the majority of these efforts, several resolutions<sup>25</sup> expressing their practical support to a nuclear free world, with the further re-approval of these commitments by the **African-Nuclear-Weapon-Free-Zone Treaty**<sup>26</sup>, also known as the Pelindaba Treaty (1996). The Treaty announces Africa as a nuclear free zone, in accordance with the principles of the Statute of the Organization of African Unity, which promoted regional security and stability, and its alternative proposal was about the development of regional co-operation in order to strengthen the civil use of nuclear production. The Pelindaba Treaty<sup>27</sup> actually strengthens the objectives of the NPT and reinforcing the non proliferation efforts.

<sup>25</sup> Undocs.org. (n.d.). A/RES/72/60 - E - A/RES/72/60.] Available at: <https://undocs.org/A/RES/72/60>

Undocs.org. (n.d.). A/RES/72/34 - E - A/RES/72/34. Available at: <https://undocs.org/A/RES/72/34>

<sup>26</sup> Iaea.org. (n.d.). African Nuclear Weapon-Free-Zone Treaty (Pelindaba Treaty) | IAEA. Available at: <https://www.iaea.org/publications/documents/treaties/african-nuclear-weapon-free-zone-treaty-pelindaba-treaty>

<sup>27</sup> Au.int. (n.d.). The African Nuclear-Weapon-Free Zone Treaty (Pelindaba Treaty) | African Union. Available at: <https://au.int/en/treaties/african-nuclear-weapon-free-zone-treaty-pelindaba-treaty>



Moving on to the next legal document that is available for the current study, it is useful to mention the **Comprehensive**

**Nuclear-Test-Ban Treaty (CTBT)**<sup>28</sup>, which was first presented in June 1996. It has not entered into force yet, as a result of the non achievement of 44 prerequisite ratifications. In other words, the Treaty needed 44 countries to ratify<sup>29</sup> it. It crucial to mention that for its entry into force, in the aspect of examining Africa, it is needed the ratification of Egypt. The Treaty was constructed by an Ad hoc Committee, which in fact turned out as the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO)<sup>30</sup>. The role of the African States in those efforts is more than active, since the very first chairperson of it was originated from South Africa, and furthermore, between 1995 and 2015, with the participation of chairpersons from Algeria, Namibia, Nigeria. Africa has an active contribution on maintaining and promoting international security and denuclearization through the CTBTO's activities. The CTBT Organization has already launched an accurate map<sup>31</sup> of the counties' current status on the implementation of the CNTB Treaty, which is actually helpful for its evaluation process.

It is essential to mention that there are numerous legal binding texts that define a legal framework in order to regulate multilateral or bilateral negotiations and relations, as well as to strengthen the efforts of non proliferation and reassure the statements on the actual

<sup>28</sup> Un.org. (2019). *Comprehensive Nuclear-Test-Ban Treaty (CTBT)* – UNODA. Available at: <https://www.un.org/disarmament/wmd/nuclear/ctbt/>

<sup>29</sup> Un.org. (2019). *Comprehensive Nuclear-Test-Ban Treaty (CTBT)* – UNODA. Available at: <https://www.un.org/disarmament/wmd/nuclear/ctbt/>

<sup>30</sup> Ctbto.org. (n.d.). *Home: CTBTO Preparatory Commission*. Available at: <https://www.ctbto.org/>

<sup>31</sup> Ctbto.org. (2019). *CTBTO World Map*. Available at: <https://www.ctbto.org/map/>

commitments on paving through a nuclear free world. The **Treaty on the Prohibition of Nuclear Weapons**<sup>32</sup> is the latest Treaty, which was conducted from the negotiations of 130 countries and underlined their commitments for preserving the status quo on the use, development, possession, acquisition and proliferation of nuclear weapons<sup>33</sup>.

Additionally, the creation of the African Union in 2002 was decisive for the contribution of the majority of African States<sup>34</sup> in the non proliferation regime and the development of regional security and stability. For instance, the African Union Peace and Security Council<sup>35</sup> held in April of 2019 a specific session on promoting the idea of disarmament in the context of the UN Treaty on the Prohibition of Nuclear Weapons, not only in a theoretical basis, but also, in a practical way.

The **African Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology**<sup>36</sup> (AFRA), which entered into force in 1990, enlightens the importance of the sustainable use and development of nuclear science and its contribution to the socioeconomic development of African Countries. It underlines that the African Member States can refer to this intergovernmental agreement to enhance in their operational projects that could boost the civil use of nuclear technological applications.

Taking into consideration, the importance of the existing legal framework, it is fruitful to note and underline the key factors of the current situation of the non proliferation efforts in Africa. Are there any other aspects of the issue that Africa has not considered yet, although it has voluntarily dismantled its nuclear programme in 1990?

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<sup>32</sup> Icanw.org. (n.d.). *Treaty on the Prohibition of Nuclear Weapons*. Available at: <http://www.icanw.org/wp-content/uploads/2018/06/tpnw-info-kit-v2.pdf>

<sup>33</sup> Armscontrol.org. (n.d.). *The Treaty on the Prohibition of Nuclear Weapons At A Glance | Arms Control Association*. Available at: <https://www.armscontrol.org/factsheets/nuclearprohibition>

<sup>34</sup> Peaceau.org. (2018). *Press Statement of the Peace and Security Council (PSC) of the African Union (AU)*. Available at: <http://www.peaceau.org/uploads/psc-.763.press-statement-nuclear-energy.10.04.2018.pdf>

<sup>35</sup> Icanw.org. (2019). *ICAN at the African Union | ICAN*. Available at: <https://www.icanw.org/campaign-news/ican-at-the-african-union/>

<sup>36</sup> Iaea.org. (n.d.). *African Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology (AFRA) | IAEA*. Available at: <https://www.iaea.org/about/partnerships/regional/cooperative-agreements/african-regional-cooperative-agreement-for-research-development-and-training-related-to-nuclear-science-and-technology-afra>

## 7. Discussion on the Topic

### 1. Nuclear Terrorism

In December 1982, four explosions occurred at the African nuclear power plant, Koeberg. Located in Cape Town, it could have spread radioactive material to a very large residential area. The attack was attributed to a terrorist Muslim organization. As a result, the South African government has suffered a humiliating political and economic blow<sup>37</sup>.

Nuclear and other radiological materials and instruments have provided valuable assistance to society in the fields of medicine, agriculture, industry and energy supply. However, the risk of nuclear weapons being used for terrorism or other criminal activities is of high possibility. The use of an improvised nuclear device would have very serious consequences. It is certain that incidents of this kind will be disastrous for human health and the environment will create turmoil and adversely affect economic and political stability around the world<sup>38</sup>.

The Counter Terrorism Research and Resource Centre (CTRRC)<sup>39</sup> is highly concerned on the terrorist use of nuclear weaponry, bearing in mind its life-threatening consequences and the factor of the uncontrolled use of the captivating nuclear technology. Africa's rich uranium depository is appreciable, taking into consideration the further dominance of nuclear energy. This fact increases the risk of exploitation of the continent's nuclear materials from terrorist organizations. Africa is considered as a 'facilitating environment and target-rich environment for several terrorist networks, consequently it is crucial to inspect the most efficient ways to approach the control of those networks. Reportedly, bombing explosions have taken place in uranium mining sites, in Arlit (French-owned mine in Niger) by a terrorist organization known as the Movement for Oneness and Jihad in Western Africa (MUJAO), with unexpected consequences, such as the leak of radiation, the loss of human lives and the destruction of the mining infrastructure.

Africa's continental structure consists of ungoverned territories, where there are taking place various internal wars and armed conflicts, and of territories that are prone to terrorist attacks, such as Somalia, Djibouti, Ethiopia, Kenya, countries with major Muslim dominance and terrorist activities of Al Qaeda. Let us mention that Al Qaeda<sup>40</sup> is not the only one terrorist group with plenty of activities in the area. A Somalia-based militant

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<sup>37</sup> Ingentaconnect.com. (2019). *Nuclear terrorism in Africa : the ANC's Operation Mac and the att...: Ingenta Connect.* [online] Available at: <https://www.ingentaconnect.com/content/sabinet/hist/2015/00000060/00000002/art00003> [Accessed 7 Oct. 2019].

<sup>38</sup> Interpol.int. (2019). *Radiological and Nuclear terrorism.* [online] Available at: <https://www.interpol.int/Crimes/Terrorism/Radiological-and-Nuclear-terrorism> [Accessed 7 Oct. 2019].

<sup>39</sup> Repository.up.ac.za. (2019). *NUCLEAR TERRORISM AS A POSSIBLE THREAT TO AFRICA.* Available at: [https://repository.up.ac.za/bitstream/handle/2263/67965/Zwane\\_Nuclear\\_2018.pdf?sequence=1&isAllowed=y](https://repository.up.ac.za/bitstream/handle/2263/67965/Zwane_Nuclear_2018.pdf?sequence=1&isAllowed=y)

<sup>40</sup> Anon, (2019) Kenya siege ends as Kenyan forces secure Nairobi's Westgate Mall Available at: <https://www.pri.org/categories/al-qaeda-africa>

group called al Shabaab<sup>41</sup> is noted that attacks in several territories of geostrategic importance. Their activity has included bombing attacks, such as the one that killed over 500 civilians in Kenya, in October 2017.

The upcoming threats that are reflecting to the use of nuclear materials from terrorists need immediate actions. In Africa occurs in addition to this factor, the fact that the majority of African States are claimed to lack of transparency, sustainable governance and accountability. This is the turning point of the international community's initiatives. In what way could possibly the DISEC Committees, the UN Agencies and Funds help African Countries in a sustainable way of facing nuclear terrorism? In what way could Africa promote regional security?

## **2. Could illicit trafficking of nuclear materials be controlled from the influence of non African States in Africa?**

Illicit trafficking of weapons, or energy, is a multidimensional phenomenon, which acquires not only applicable solutions in response of it, but also efficient technical measures in order to prevent it from occurring. As it is mentioned above, Africa is a continent that is a possessor of advanced nuclear technologies, and it is crucial to discuss the development of security factors for sensitive nuclear technologies<sup>42</sup>. Actually there are plenty of reported incidents, relevant to illicit trafficking of uranium, which exists in the African underground sources. The IAEA Incident and Trafficking Database System<sup>43</sup> is already available for possible reports from member states. It compiles the necessary information in order to form specific reports for the participating states. The examination of illicit trafficking in addition to undetected activities is critical to be used from each country's national governments in favour of their own security policy. Furthermore, let us mention the fact that IAEA has actually implemented National Points of Contact (POC) so as to ensure the most convenient and trustworthy way for the collection of such reports<sup>44</sup>. Even the Security Council's resolution has mentioned the importance of these POC.

The prohibition of illicit trafficking of nuclear materials is generally known, but the major problematic factor of it is the fact that it is claimed that many countries such as, Russia,

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<sup>41</sup> Council on Foreign Relations. (n.d.). *Al-Shabab*. Available at: <https://www.cfr.org/background/al-shabab>

<sup>42</sup> US Legal, I. (n.d.). *Sensitive Nuclear Technology Law and Legal Definition* | USLegal, Inc.. Definitions.uslegal.com. Available at: <https://definitions.uslegal.com/s/sensitive-nuclear-technology/>

<sup>43</sup> Iaea.org. (2019). *Incidents of nuclear and other radioactive material out of regulatory control 2019 Fact Sheet*. Available at: <https://www.iaea.org/sites/default/files/19/04/itdb-factsheet-2019.pdf>

<sup>44</sup> Un.org. (n.d.). *National Action Plans Can Help States Prevent Terrorists from Acquiring Weapons of Mass Destruction, 1540 Committee Chair Tells Security Council* | Meetings Coverage and Press Releases. Available at: <https://www.un.org/press/en/2019/sc13742.doc.htm>



insists on using African States' nuclear infrastructure and increase its economic development rates by developing these countries' nuclear technology. Rwanda, Uganda, Ghana, South Africa is told that have already negotiated with the Russian Government in order to achieve a sustainable agreement for the role of the Russian influence in the military and civil use of nuclear technology. According to the information provided by 'The Guardian', Rosatom, the Russian state corporation, tends to achieve the best possible investments in African Countries (Nigeria, Sudan, Ethiopia and the Republic of Congo), so as to raise nuclear reactors. It is also claimed that the Russian Federation has provided to Egypt the 85% of the cost of the construction of its nuclear reactor<sup>45</sup>. Additionally, in September of 2019, under the auspices of IAEA, Russia and Uganda came up with a fruitful and beneficial agreement for the purposes of promoting peaceful nuclear use<sup>46</sup>.

The African States, bearing in mind their nuclear programmes that voluntarily were dismantled in 1990, should not ignore the main aspects of the potentials that would come up from the economic and technical support from countries such as Russia. They could possibly promote intergovernmental agreement, taking into consideration the benefits of the receiver investments and expertise. The existence of such regulatory agreements and the responsibility of these non African States could possibly be beneficial for the prohibition of illicit trafficking of nuclear materials itself. Consequently, African States could ensure the possession of highly developed technological applications in order to control and identify the transportation of nuclear material and the identification of nuclear elements by the use of potable technologies.

### 3. The case of Egypt

Egypt is a party to the Non-Proliferation Treaty (NPT) and is a major supporter of the creation of a zone without nuclear weapons of mass destruction in the Middle East<sup>[1]</sup>.

The country took the initiative and asked for it. The request was accepted after a 1995 decision. For the past two decades, the only decision approved as a single regional matter by the Treaties for Review has been ongoing. Egypt has been making vigorous and sustained efforts for decades to completely eliminate nuclear weapons in the Middle East<sup>[2]</sup>.

As for the Non-Proliferation Treaty (NPT), it has signed it but has not ratified it as there was powerful information and evidence that Israel was developing a nuclear weapons program that period<sup>[3]</sup>.

The state has taken significant steps to upgrade present-day Egypt as it seeks to create a power plant that will be the core of a nuclear program aimed at integrating nuclear know-

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<sup>45</sup> Burke, J. (2019). *Russia pushing 'unsuitable' nuclear power in Africa, critics claim*. the Guardian. Available at: <https://www.theguardian.com/world/2019/aug/28/russia-pushing-unsuitable-nuclear-power-in-africa-critics-claim>

<sup>46</sup> Rosatom.ru. (2019). *Russia and Uganda sign intergovernmental agreement on cooperation in the peaceful use of nuclear energy*. Available at: <https://www.rosatom.ru/en/press-centre/news/russia-and-uganda-sign-intergovernmental-agreement-on-cooperation-in-the-peaceful-use-of-nuclear-ene/>

how for peaceful purposes. It has also taken all the necessary security measures required to do so and has placed particular emphasis on ensuring the highest degree of compliance with nuclear safety standards<sup>[4]</sup>.

Egypt, it claims, has no nuclear weapons. And it is indeed recognized by the 1981 Non-Proliferation Act as a non-nuclear weapon state. The treaty it has signed but has not ratified concerns a complete ban on testing. It must be signed and ratified by the country and by 8 other states out of the 44 specified in the Treaty.

It has signed the Convention on Biological and Toxic Weapons, but has not yet ratified and signed the Convention on Chemical Weapons<sup>[5]</sup>.

Also, Egypt offers the utmost priority to full nuclear demobilization in an exceedingly specific timeframe while not discrimination and thru clear examination mechanisms. Egypt powerfully supports negotiating a comprehensive international pact to attain total nuclear demobilization. That happens through a three-sided system characterized by effectiveness to make sure examination and international direction<sup>[6]</sup>.

The nation asserts the importance of supporting international cooperation within the field of peaceful uses of energy and maintaining the inalienable right of the states party to the nuclear non-proliferation pact to develop, research, produce, and use energy for peaceful functions in accordance with Article IV of the pact.

Egypt asserts that any measures that may impede, whether or not partially or totally, the whole use of those inalienable rights would disrupt the fragile balance between the rights and obligations within the framework of the non-proliferation pact. this may contradict the treaty's objective itself and would additionally increase the gap between the developed and developing states during this field<sup>[7]</sup>.

What should concern us is whether Egypt has not finally ratified the agreement on other grounds; According to unmistakable evidence, Egypt and Russia signed an agreement on November 19, 2015, below that Russia can build and finance Egypt's 1st nuclear energy plant. A memorandum of understanding was also signed between the Russian and Egyptian regulators "to facilitate the development of the nuclear infrastructure" required for the project<sup>[8]</sup>.

Egypt has also been shown to have acquired nuclear weapons technology and perhaps material from countries such as China, North Korea and Pakistan.

The United States has been aware of Egypt's secret nuclear weapons program since at least 1986. However, successive administrations have decided not to disclose Egyptian efforts in an effort to maintain US strategic relations with the larger Arab state and to maintain peace with Israel. .

In 2010, the International Atomic Energy Agency (IAEA) stated that Egypt carried out 16 secret nuclear power experiments from 1990 to 2003<sup>[9]</sup>. It's worth noting that the main reason that Egypt does not ratify is because there is no clear term to block the



experiments, which it considers a major omission and has required it for all countries<sup>[10]</sup>. So far, Cairo has rejected nuclear weapons efforts.

#### **4. Promoting nuclear energy when Africa faces problems with poverty and basic needs?**

The discussions about the advancement of nuclear technologies and the use of nuclear energy in a continent like Africa, where there is a majority of its countries that lack basic infrastructure, have low cost of living and the lack of facilities of the so-called first world countries, have set on a specific debate. The reasonable question that arises from this aspect is whether it is sustainable for Africa to grow and invest in specific nuclear technologies or the countries should focus on providing the basic needs to the citizens. The majority of the public opinion in Africa was concerned. Was it right to invest \$29bn dollars light water nuclear reactor plant in Egypt, when at the same time, the African States face poverty<sup>47</sup>, lack of clean water and food supplies?

Additional concerns are relevant to the environmental consequences of the exploitation of the African resources and the compatibility of this exploitation with the current legal framework for environmental protection. Friends of the Earth, an environmental NGO, has already expressed its concerns. According to its concerns, the problem will be just exaggerated, in a way that would worsen poverty rates, hunger and the expansion of diseases in the poorer African countries. Consequently, the increase of the reliance of nuclear energy is questionable.

On the other hand, this possibility could probably be more beneficial than harmful for South Africa's energy<sup>48</sup>, poverty, unemployment and growth problems<sup>49</sup>. The CEO<sup>50</sup> of the supplier company, called Eskom, of South Africa's energy, has already pointed out the importance of nuclear power, which could lower electricity costs. Focusing on how to find sustainable policies could be beneficial for the counties' employment rates, as well as the achievement of better rates in the growth climax.

To sum up, the international community needs to re-examine the importance of focusing on growth of the nuclear factor, provided that it could regulate the prevention of nuclear terrorism or illicit trafficking, for the sake of African countries' growth.

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<sup>47</sup> Iaea.org. (n.d.). *Understanding Poverty in Africa*. Available at: <https://www.brookings.edu/blog/africa-in-focus/2018/11/21/figure-of-the-week-understanding-poverty-in-africa/>

<sup>48</sup> Un.org. (n.d.). *Is Africa ready for nuclear energy? | Africa Renewal*. Available at: <https://www.un.org/africarenewal/magazine/august-november-2018/africa-ready-nuclear-energy>

<sup>49</sup> Engineering News. (n.d.). *Nuclear energy obvious solution to SA power problems*. Available at: <http://m.engineeringnews.co.za/article/nuclear-energy-obvious-solution-to-sa-power-problems-power-producer-2016-05-06>

<sup>50</sup> Un.org. (n.d.). *Is Africa ready for nuclear energy? | Africa Renewal*. Available at: <https://www.un.org/africarenewal/magazine/august-november-2018/africa-ready-nuclear-energy>

## 5. What if a major nuclear accident were to happen in South Africa?

Undoubtedly the cause of a nuclear accident is a very serious political and social phenomenon. If that happens in Africa the consequences will be catastrophic.

If an accident like Chernobyl in 1986 and Fukushima in 2011 happened in any part of Africa the catastrophe would be complete. The impacts will be directly on human health, agriculture and fisheries.

It is self-evident and certainly irreversible that no food produced in this area will be safe and in a state of human consumption. Wheat for bread, milk or dairy products, vegetables and meat or fish will be contaminated and dangerous.

Experts have repeatedly called for emergency zone designs. However, as long as the African authorities want to take security measures it is not easy. Speaking of a large country with a large population, evacuating an area near the scene of an accident is so difficult to do. In fact, the parameters of a disaster do not come into the box as the circumstances can be fatal<sup>51</sup>.

## 8. Previous attempts in the context of nuclear non proliferation

**The International Atomic Energy Agency (IAEA)**<sup>52</sup> was established in 1957, and it is part of the UN family as the 'Atoms for Peace' Organization. The advancement of secure and manageable nuclear technologies was initiated in accordance to sustainable development and to the preservation of international peace. The organization's activities, as it is crystal clear through its Statute, tend to be compatible with the NPT's obligations. The IAEA's activities are relevant not only with nuclear based technology, but also, with the contentious applications of it. IAEA carries laboratories for scientific purposes on nuclear technology in Vienna, Seibersdorf and Monaco. In addition it raises technical programmes for the civil use of nuclear energy, such as the Peaceful Uses Initiative<sup>53</sup> (PUI). Examining its projects in Africa, it is critical to mention the Regional Technical

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<sup>51</sup>ESI-Africa.com. (2019). *What if a major nuclear accident were to happen in South Africa?*. [online] Available at: <https://www.esi-africa.com/features-analysis/major-nuclear-accident-happen-south-africa/> [Accessed 6 Oct. 2019].

<sup>52</sup> Iaea.org. (2019). *International Atomic Energy Agency | Atoms for Peace and Development*. Available at: <https://www.iaea.org/>

<sup>53</sup> Iaea.org. (n.d.). *What is the Peaceful Uses Initiative (PUI) | IAEA*. Available at: <https://www.iaea.org/services/key-programmes/peaceful-uses-initiative>

Cooperation Programme<sup>54</sup> of the agency, as well as the International Project on Innovative Nuclear Reactors and Fuel Cycles<sup>55</sup> (INPRO).

Several Countries of the African Continent, such as South Africa, have already implemented the so called **Good Practices for corporate standards to support the efforts of the International Community in the non proliferation of weapons of mass destruction**<sup>56</sup>, under the auspices of the Nuclear Suppliers Group<sup>57</sup> and its principles.

The **African Commission on Nuclear Energy**<sup>58</sup> as actual taken many steps forward the whole nuclear non proliferation initiative. It introduces nuclear applications in the health system, in addition to the sustainable management of the radio-active waste. It has initiated and implemented several strategic plans in order to ensure the verification process and possession of monitoring systems in a way that indicates and investigates the existence of nuclear technologies.

**Africa's monitoring stations** under the know-how of IAEA specialists happen to be one of a kind. It is essential to mention the operational programme<sup>59</sup>, of long term safety in the Nuclear Power Plant of Koeberg in South Africa, during September of 2019. The specially trained team of experts with an international prestige (Belgium, Brazil, the Czech Republic, Japan, France, Romania, Sweden, United Kingdom, USA and two IAEA staff members) came up with results in accordance to the sustainability of the good practices of the nuclear industry.

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<sup>54</sup> Iaea.org. (n.d.). *How IAEA Technical Cooperation projects work* | IAEA. Available at: <https://www.iaea.org/services/technical-cooperation-programme/how-it-works>

<sup>55</sup> Iaea.org. (n.d.). *International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO)* | IAEA. Available at: <https://www.iaea.org/services/key-programmes/international-project-on-innovative-nuclear-reactors-and-fuel-cycles-inpro>

<sup>56</sup> Nuclearsuppliersgroup.org. (2019). *GOOD PRACTICES FOR CORPORATE STANDARDS TO SUPPORT THE EFFORTS OF THE INTERNATIONAL COMMUNITY IN THE NONPROLIFERATION OF WEAPONS OF MASS DESTRUCTION*. Available at: [https://www.nuclearsuppliersgroup.org/images/Files/National\\_Practices/NSG\\_Measures\\_for\\_industry\\_update\\_revised\\_v3.0.pdf](https://www.nuclearsuppliersgroup.org/images/Files/National_Practices/NSG_Measures_for_industry_update_revised_v3.0.pdf)

<sup>57</sup> Nuclearsuppliersgroup.org. (n.d.). *Nuclear Suppliers Group*. Available at: [https://www.nuclearsuppliersgroup.org/images/Files/National\\_Practices/NSG\\_Measures\\_for\\_industry\\_update\\_revised\\_v3.0.pdf](https://www.nuclearsuppliersgroup.org/images/Files/National_Practices/NSG_Measures_for_industry_update_revised_v3.0.pdf)

<sup>58</sup> Iaea.org. (2018). *African Commission on Nuclear Energy*. Available at: <https://www.iaea.org/sites/default/files/19/09/gc63-african-union.pdf>

<sup>59</sup> Iaea.org. (2019). *IAEA Concludes Long Term Operational Safety Review at South Africa's Koeberg Nuclear Power Plant* | IAEA Available at: <https://www.iaea.org/newscenter/pressreleases/iaea-concludes-long-term-operational-safety-review-at-south-africas-koeberg-nuclear-power-plant>

## 9. Conclusion

The African contribution to nuclear proliferation and later, the nuclear non proliferation is generally known and accepted. The majority of the continent's States are Member States of the main bodies of Treaties referred to the efforts of nuclear non proliferation. In addition, the majority of African States are familiar with the idea of disarmament and denuclearization, as a result of the apartheid period, when they were forced to face serious forms of discrimination and violence. The sessions of this Committee's gathering should give the chance to the delegates of each and every participating country to have active participation in order to enlighten the aspects given from the current document. It would be fruitful and reasonable for the progress of the Committee to elaborate more on the Topics under discussion and propose concrete solutions.

The idea of Disarmament, Non Proliferation and Denuclearization fall upon the will for the maintenance of a peaceful, sustainable, free and democratic world, in which each and every Nation would equally grow and develop. It is in the peoples of these United Nations hands to achieve and create this kind growth and development.

As it is derived from the President's of South Africa passionate and innovative speech on 21 September 1998 addressing the UN General Assembly<sup>60</sup>:

*I call on all members of the United Nations seriously to consider this important resolution and to give it their support. We must ask the question, which might sound naive to those who have elaborated sophisticated arguments to justify their refusal to eliminate these terrible and terrifying weapons of mass destruction – why do they need them anyway!*

*In reality, no rational answer can be advanced to explain in a satisfactory manner what, in the end, is the consequence of Cold War inertia and an attachment to the use of the threat of brute force, to assert the primacy of some States over others.*

## 10. Points to be addressed

- What measures could the Member States take to avoid a nuclear accident and what can they do if this happens?
- How nuclear weapons intended for civilian purposes can be used for nuclear terrorism and what prevention measures are needed?

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<sup>60</sup> Foundation, T. (n.d.). *Nelson Mandela Calls for the Elimination of Nuclear Weapons*. Nuclear Age Peace Foundation. Available at: <https://www.wagingpeace.org/nelson-mandela-calls-for-the-elimination-of-nuclear-weapons/>

- In what ways countries can find out if other member states are secretly possessors of nuclear weapons?
- In what way could the situation in Egypt be resolved?
- Are there any solutions for the issue of Muslim terrorist groups exploiting nuclear power and nuclear weapons?
- Is the current legal framework efficiently structured in order to promote non proliferation?
- How could the issue of Africa's nuclear non proliferation be explained in relation to its nuclear past?
- Is Africa a continent with States that are liable for the advancement of nuclear power?
- What could be the role of countries like Russia in Africa's efforts of nuclear non proliferation? Are there any concerns about its economic influence?
- Could the civil use of nuclear power turn out to be a source of promoting nuclear proliferation? What measures would be efficient for the best operational agenda of other non African States in Africa?
- What practical measures should be taken in order to promote non proliferation in Africa?
- How could IAEA further promote in a practical way non proliferation in Africa?
- Are there any other countries with controversial nuclear statements? How are these countries' nuclear programs related to Africa?
- Is the NPT strongly binding to its Member States? Should it be re-examined?
- How could the CTBTO be further involved in the actions for non proliferation?
- Are the African Member States linked to each other as far as their nuclear status is being examined?
- In what ways could African Countries, IAEA, CTBTO and other agencies prevent the illicit trafficking of nuclear weapons?

## **11. Bibliography**

Un.org. (2019). UN General Assembly - Functions and Powers of the General Assembly. Available at: <http://www.un.org/ga/about/background.shtml>

Hrlibrary.umn.edu. (2019). Charter of the United Nations: Chapter IV the General Assembly. Available at: <http://hrlibrary.umn.edu/peace/docs/chapter4.html>

Un.org. (2019). Chapter IV. Available at: <http://www.un.org/en/sections/un-charter/chapteriv/index.htm1>

Un.org. (2019). UN General Assembly - First Committee - Disarmament and International Security. Available at: <http://www.un.org/en/ga/first/>

Kenneth Waltz, *The Spread of Nuclear Weapons: More May Better* (London: Adelphi Papers, 1981)

iaea.org. (2019). *IAEA Concludes Long Term Operational Safety Review at South Africa's Koeberg Nuclear Power Plant* / IAEA Available at: <https://www.iaea.org/newscenter/pressreleases/iaea-concludes-long-term-operational-safety-review-at-south-africas-koeberg-nuclear-power-plant>

Foundation, T. (n.d.). *Nelson Mandela Calls for the Elimination of Nuclear Weapons*. Nuclear Age Peace Foundation. Available at: <https://www.wagingpeace.org/nelson-mandela-calls-for-the-elimination-of-nuclear-weapons/>

Nuclearsuppliersgroup.org. (2019). *GOOD PRACTICES FOR CORPORATE STANDARDS TO SUPPORT THE EFFORTS OF THE INTERNATIONAL COMMUNITY IN THE NONPROLIFERATION OF WEAPONS OF MASS DESTRUCTION*. Available at: [https://www.nuclearsuppliersgroup.org/images/Files/National Practices/NSG Measures\\_for industry update revised v3.0.pdf](https://www.nuclearsuppliersgroup.org/images/Files/National Practices/NSG Measures_for industry update revised v3.0.pdf)

Nuclearsuppliersgroup.org. (n.d.). *Nuclear Suppliers Group*. Available at: [https://www.nuclearsuppliersgroup.org/images/Files/National Practices/NSG Measures\\_for industry update revised v3.0.pdf](https://www.nuclearsuppliersgroup.org/images/Files/National Practices/NSG Measures_for industry update revised v3.0.pdf)

iaea.org. (2018). *African Commission on Nuclear Energy*. Available at: <https://www.iaea.org/sites/default/files/19/09/gc63-african-union.pdf>

Undocs.org. (n.d.). *A/RES/72/60 - E - A/RES/72/60*. Available at: <https://undocs.org/A/RES/72/60>

Undocs.org. (n.d.). *A/RES/72/34 - E - A/RES/72/34*. Available at: <https://undocs.org/A/RES/72/34>

## **12. Further Resources**

The United Nation's official website: <https://www.un.org/en/>

The African Union's official website: <https://au.int/>

The International Atomic Energy Agency official website: <https://www.iaea.org/>

The Comprehensive Nuclear Test Ban Treaty Organization's official website: <https://www.ctbto.org/>