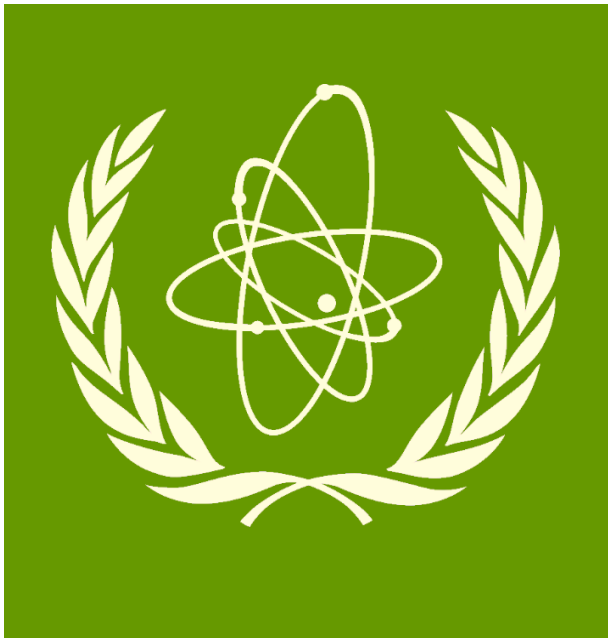

International Atomic Energy Agency

25, 26 y 27 de
Marzo del 2015

Dearest delegates,

Feel welcome to the model of the United Nations 'CELMUN'. We thank you for being a part of the community that wants to make a change in the world, and we can assure you that those are the ones who will actually make the difference in our home, the Earth.

For the following three days you will have to keep in mind that you are representing a nation, so it is your duty to give your best and come up with solutions that can be applied to real problems which trouble our world, keeping in mind your country's best interest and, at the same time, prove that Nuclear energy is constructive, not destructive.

During the following debate we will be talking about solutions that can protect society and nature from the damaging potential that the Nuclear energy can have, will encourage nations to make a correct use of the energy and reduce the danger that it can lead as well as eradicating the usage of nuclear weaponry, terrorism and truly use atoms for peace and wellbeing. We are glad to provide you our unconditional help in issues that come up during our event.

Make this model yours, enjoy the sessions and embrace the success that only your best effort can provide you. Once again, thank you for being a part of our team, let´s work as one!

Chair of the International Atomic Energy Agency

About the Agency

The International Atomic Energy Agency's mission is to prevent the spread of nuclear weapons and to help all countries –especially in the developing word- benefit from the peaceful, safe and secure use of nuclear science and technology.

Topic A: Nuclear Safety

Nuclear energy refers to the energy released during nuclear fission or fusion. It is known for its destructive potential as seen in various events like the World War II's atomic bombs or the explosion of the reactor in Fukushima, Japan.

Nuclear safety includes the actions taken to prevent accidents that can be caused by a security breach inside a nuclear reactor or its inadequate use in a military field that can endanger the **environment**, jeopardize a country´s integrity or cause an excess of radiation which, in its expansion, can harm the human being by creating **mutations**. It has also the duty to eradicate the fear than began to rise because of the accidents responsible of many environmental catastrophes, blinding the world to the many opportunities that the nuclear energy offer to create a better world.

One of the main problems that the nuclear safety faces are the **nuclear weapons**, which are considered to be the most dangerous on Earth, as they possess a major power of destruction that could lead to a nuclear war. Considering the devastation that would be created upon all mankind by a war, the need to take measures to safeguard the security of people and prevention of wider distribution of nuclear weapons in 1970 several countries agreed to sign a Treaty on the non-proliferation of nuclear weapons.

As for the **dangerous waste management** involve a variety of materials requiring different types of management to protect people and the environment. They are normally classified as low-level, medium-level or high-level wastes, according to the amount and types of radioactivity in them. Another factor in managing wastes is the time that they are likely to remain hazardous. This depends on the kinds of radioactive isotopes in them, and particularly the half-life characteristic of each of those isotopes.

On the other hand, **nuclear terrorism** is a continuing threat. It can be the attempt to steal a nuclear weapon or acquire the nuclear material necessary to build a nuclear device, acquire radioactive materials with the goal of making a Radiological Dispersal Device (RDD), or so-called "**dirty bomb",** attempt to sabotage nuclear power stations, research reactors, storage facilities or transport operations with the aim of spreading radioactive contamination. Progress has been made in recent years in ensuring that nuclear and other radioactive material, as well as associated facilities, are properly protected everywhere in the world. But much remains to be done.

Importation and exportation of radioactive material can not only increase the possibilities of its malicious usage, but can be also considered as a direct violation to the Nonproliferation treaty. It also takes an economic impact on the mining country since the production only benefits only the purchasing country for its own development and usage. Controversial opinions can be found when we talk about nuclear reactors. Besides being in a constant development, the future holds many other projects that include such, creating a threat if not well established, used or maintained.

The peaceful **use of nuclear energy** in medicine, food, environment, clean energies and other **civilian usages** has become more and more attractive over the years. Access to this kind of technology is regulated by the terms of the **Nuclear Non-proliferation Treaty (NPT)** and can be used as long as it does not have military purposes. . Although the spread of **atomic energy increases** de possibility of nuclear terrorism, construction of nuclear weapons disguised as civil projects and wrong management of the material resulting in environmental destruction, the potential of its peaceful usage in several fields has come to the result of 436 operational nuclear power plants and more currently in construction.

Guide Questions

1. What is your country's nuclear energy profile?
2. Does your delegation have any treaties that include nuclear energy with other nations?
3. What is your country's position in the NPT?
4. Which is your country's import and export index of special fissionable material?
5. Has your country used the nuclear energy for military purposes such as the production of nuclear weaponry?
6. How many operable reactors can be found in your delegation?
7. How does your delegation handle its radioactive waste?
8. How does your nation stand in the Convention on supplementary compensation for nuclear damage?
9. Does your delegation have a Nuclear Safety plan?
10. I Is your country jeopardizing the safety of another nation by using the nuclear energy? If so, how does it plan to handle the problem?

Topic B: Nuclear energy for its civilian use

Nuclear energy refers to the energy released during nuclear fission or fusion. It is known for its destructive potential as seen in various events like the World War II's atomic bombs or the explosion of the reactor in Fukushima, Japan.

Over the years the interest in nuclear energy has increased resulting in its inclusion in **different fields of study** that goes from electrical energy technology to medicine or even nutrition. There are currently three principal uses for civilian HEU[1] as research reactor fuel; as targets for the production of medical isotopes; and as fuel in icebreaker propulsion reactors.[2]

"**Nuclear medicine** is a field of medicine that uses a trace amount of radioactive substances called radioisotopes for the diagnostic and treatment of many health conditions"[3] Diseases like **cancer** have improved their possibility of a cure by using radionuclides, which provide diagnostic information about the body by the in vitro and in vivo procedures and radiation for the treatment, apart from being also used in radiology, functional imaging and therapies. One of the main issues comes from the simple question: **How will the developing countries have access to such modern technologies?**

'The IAEA has published a small book **Considerations to Launch a Nuclear Power Programme** (2007) which addresses the issues involved in a country deciding upon and implementing a nuclear power program. In particular it looks at those considerations before a decision is made, before construction starts and subsequently. It then briefly covers twelve factors for consideration.'[4]

Other areas of concern for IAEA are **malnutrition and hunger** since they have a profound impact on the general health and the development of nations and so encourages the deployment of nuclear techniques to improve childs'

[1] Highly Enriched Uranium (HEU) is uranium with the proportion of the U-235 isotope at or above 20%
[2] http://researchmedicalcenter.com/careers/education/school-of-nuclear-medicine.dot
[3] IAEA Bulletin 2014, Radiation Medicine & Technology: Diagnoses & Treatment
[4] http://www.world-nuclear.org/info/Country-Profiles/Others/Emerging-Nuclear-Energy-Coun

health. Currently the agency is concluding a research project on food fortification and biofortification to increment the micronutrient status during early life. Examples of contributions in such fields are the assessment of body composition, of breastfeeding practice, of total energy expenditure and the design of **better nutrition programmes.**

In other fields, it is known that the common **radiotherapy** is used in most cases of cancer, making the treatment the main proof that nuclear energy (NE) can save people's life.

The peaceful usage of nuclear power, however, comes with the risk of **proliferation**. Since 1970 when the **Nuclear Non-proliferation Treaty (NPT**) was created, the world has being concerned about the destructive potential of this kind of energy and because of that around 90 per cent of the power plants are light water reactors. But even so, the plutonium isotopes that accumulate over the course of their operation are constantly jeopardizing the efforts of its inclusion in civilian projects. As a result IAEA has created a **Safety Standards**[5]

The peaceful use of nuclear energy in medicine, food, environment, clean energies and other **civilian usages** has become more and more attractive over the years. Access to this kind of technology is regulated by the terms of the Nuclear Non-proliferation Treaty (NPT) and can be used as long as it does **not have military purposes.** Although the spread of atomic energy increases de possibility of nuclear terrorism, construction of nuclear weapons disguised as civil projects and wrong management of the material resulting in environmental destruction, the potential of its peaceful usage in several fields has come to the result of 436 operational nuclear power plants and more currently in construction.

[5] http://www-pub.iaea.org/MTCD/publications/PDF/Pub1273_web.pdf

Guide Questions

1. Does your delegation invest their nuclear power for domestic use?
2. What researches does your country run to promote the use of nuclear techniques as treatment for several diseases?
3. How does your delegation contributes in the program for nutrition in developing countries?
4. How has your delegation been benefited or harmed by the nuclear energy?
5. What are the negative repercussion of using radioisotopes in patients?
6. Which is your county's opinion on the inclusion of nuclear energy to create a food breeding techniques that can decrease world hunger?
7. What is the economic impact of the Nuclear energy in your delegation?
8. How does your country stand in the creation of nuclear techniques in the fields of marine pollution and climate change?
9. How can the isotopic science be used?
10. What other uses does your country give to Nuclear energy?

Websites for further information

Página oficial: http://www.iaea.org/

Tópico A:

- http://www-ns.iaea.org/standards/default.asp?l=90
- http://www.world-nuclear.org/info/Country-Profiles/
- https://www.oecd-nea.org/civil/
- http://www.world-nuclear.org/Information-Library/
- http://www.iaea.org/sites/default/files/nuclsecurity.pdf
- http://www.world-nuclear.org/info/Economic-Aspects/Economics-of-NuclearPower/

Tópico B:

- http://www.news-medical.net/?tag=/Nuclear-Medicine
- http://www.iaea.org/scientific-databases
- http://www.iaea.org/publications/magazines/bulletin
- http://nucleus.iaea.org/HHW/Home/index.html
- http://www-ns.iaea.org/standards/default.asp?l=90
- http://www.world-nuclear.org/info/Country-Profiles/
- https://www.oecd-nea.org/civil/

QUICK PROCEDURE GUIDE

GENERAL RULES

Speak in third person (My nation, my delegation).
Do not make direct contact with the other delegates, use diplomatic notes instead.
Punctuality is paramount.
Deliver your position paper on the first session.
Dress formally.
Do not try to interrupt other delegates unless you are raising a motion.

STRUCTURE OF THE DEBATE

General debate. If you want to speak, you should raise your placard and wait for the moderator to recognize you.
Speakers' list. The delegations will speak in the indicated order, each delegation has two minutes to speak. If you have not used all of your time, you must yield it. You can yield it to the Chair, to Questions or to Comments.
Intermediate quarter. You have up to fifteen minutes to debate directly the topic in question. You can stand up. Most of the time of the intermediate quarters is to write down proposals into a working paper.
Particular debate. You are only allowed to discuss the content of the draft resolution in question, it can be in general debate or speakers' List. The Chair will decide when to open this debate.

MOTIONS

The Floor is always open.
Procedure: Open/Suspend/Close the speakers' list, to open a topic, to open an extraordinary session of questions, to close/suspend the session, to open an intermediate quarter. To introduce a document. It cannot interrupt.
Order: To call the attention of the Chair in a possible error in following the procedure. It can interrupt.
Personal Privilege: To express any discomfort with the environment. It cannot interrupt.
Parliamentary Inquiry: To inquire the Chair in order to clarify something about the procedure. It cannot interrupt.

POSITION PAPER
(1 per topic)
Just one sheet of paper each.

Flag

Committe:_____
Topic:_____
Country:_____
Name:_____
School: _____

A. Topic Background.

[Topic context]

B. Position taken by the delegation
[context of the topic in the country, problem]

C. Justification

[why is the problem happening? How can it be solved]

RESOLUTION

Working paper. It is a draft of proposals which will form part of a Draft resolution. It is reviewed by the Chair, which corrects and approves it.
Draft Resolution. Each working paper supported by the Chair will be considered as a Draft resolution. It must have the format that the Chair indicates. The particular debate will be opened.
Resolution The document is approved by two thirds of the committee. It is composed by three rounds.