# **FIAEA 2050:**

Futuristic International Atomic Energy Agency

Topic: Efforts for Post-Conflict Nuclear Cleanup and Rehabilitation in Ukraine and Russia Written by: Hugo Jaime Pérez Juárez, Santiago Gonzalez Habib



### Letter to Delegates:

Dear delegates, it is an honor to welcome you all to SPIS MUN 2025. I am pleased to announce that Hugo Pérez will be your director. Your moderator for this event will be Santiago Gonzalez. Together we will be your Chair for this Futuristic International Atomic Energy Agency MUN.

Being a delegate you will discuss possible solutions for futuristic world-class problems. On this MUN you'll discuss the environmental threats to the Russian-Ukrainian war. We know that MUN can be very challenging, more if it's your first time, but all experiences begin with a first step. Always remember that you set your limits no one else can no matter what.

As your chair, we expect ethical solutions from each of you. Try being innovative and creative, making strategic ethical solutions towards making the world a better place for everyone. As your Chai,r we hope to make this MUN as enjoyable as possible and help you all improve ethevarious skills you will gain during your journey on MUN. If any of you delegates have any questions feel free to ask me to send you questions through an email. I hope that you have fun exploring new ideas to improve your skills throughout MUN. See you soon delegates!

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### **History of the Committee:**

In 1957 the International Atomic and Energy Agency(IAEA) was established in response to the possibilities of use of new nuclear technologies. President Eisenhower invited the UN General Assembly Committee to the White House to propose the committee's establishment in December 1953. The president gave a speech which 81 nations unanimously approved in October 1956. The Agency was created as the world's "Atoms for Peace" organization within the United Nations family. The goal of the IAEA is to work with its member states and global partners to promote the safe use of nuclear technologies.

In October 1957, the people invited to the first general conference marked the Grand Hotel next to the Vienna Opera House as the Agency's temporary headquarters. Now they have two regional headquarters. They are located in Toronto Canada, New York United States, Geneva Switzerland, and Tokyo Japan.



## **History of the Topic:**

#### (2022-2024)

Russia's war on Ukraine has affected Ukraine in many ways including economic, religious, healthcare, and education, among others. On February 24, 2022, Russia declared war on Ukraine, warning other Western countries if they interfered directly Putin would give "consequences you have never seen" possibly threatening the use of nukes. Two nuclear facilities have come under the control of Russian armed forces: the Chornobyl nuclear power plant site, between 24 February and 31 March 2022, and the Zaporizhzhya nuclear power plant on 4 March 2022, which currently remains under Russian Federation control. The Kakhovka Dam incident, located in Ukraine, is that the Kakhovka dam was destroyed and both Ukraine and Russia blamed each other. This disaster caused massive flooding in the region.

The IAEA has created a program in which there are missions inside it. To accomplish the goal of helping Ukraine, Director General Rafael Mariano Grossi has frequently traveled to Ukraine to lead IAEA missions to assess the situation and conduct high-level talks. In March 2022 the IAEA committee established the seven indispensable pillars of nuclear safety. These pillars are, physical integrity, safety and security systems and equipment, operating staff, off-site power supply, logistical supply chain, radiation monitoring and emergency preparedness and response, and communications. This war has led to a massive amount of money needed. In 2023 Ukraine prime minister Denys Shmyhal said that they would need around 14 billion dollars.

The European Union's real economic growth is expected to fall by 3%. Ukraine's direct involvement has meant that they currently suffer from inflation as food is harder to grow, and Russia's sanctions have doubled electrical bills in European firms, as Russia is a key player in the oil and gas market. Germany and Italy can feel pressure as they're heavily dependent on Russia's oil and gas exports. Banks have lost approximately 30% of their loans in the region.

#### (2025 - 2035)

In 2025 the conflict escalated into a broader conflict, having more direct military involvement near nuclear sites. This has led to the intentional and accidental release of radioactive material. By the early 2030s, there had been limited use of nuclear weapons and tactical nuclear strikes, at the peak of the conflict, expanding the hostility of the conflict.

Throughout this decade there have been international responses, the United Nations, NATO(North Atlantic Treaty Organization), and other non-aligned nations have made the role of imposing sanctions, but efforts for mediating this conflict have been stalled. The IAEA has intervened to address safety concerns, on nuclear facilities in Ukraine and Russia, leading to temporary ceasefires to prevent nuclear disasters.

#### (2036-2050)

In 2040, a peace treaty was signed. Both players are left with heavily contaminated sites, because of the decades of conflict near nuclear sites. Multiple regions have been named nuclear exclusion zones, due to the fallout, radioactive leaks, and destroyed reactors.

Thanks to the war there have been many environmental impacts, regions outside the war zone have also been affected, neighboring countries are the ones also suffering like Belarus, Poland, Romania, and others.

By 2050 there continue to be humanitarian consequences, and refugee crises are still a problem due to the unsafe living conditions near the contaminated areas.

### **Introduction of the Topic:**

As the Russo-Ukrainian war ended in 2040. Both Russia and Ukraine were seriously contaminated by reactive materials, and our goal for this conference is going to be the challenges of nuclear cleanup. As intentional or accidental nuclear leaks have happened, our challenge will be to clean up the land, and air, and make water clean again.

The war has not only impacted the involved countries, but it has also affected neighboring countries (Belarus, Poland, Romania), as they face contamination in rivers and agricultural land. Not only did the war contaminate, but it has also created refugee crises, as there are unsafe living conditions in the impacted areas. Health crises have emerged, like cancer rates increasing, and genetic mutations have been widespread. We as a committee are tasked with leading the aftermath. For this challenge, we have advanced technology with robotic systems, next-generation nuclear containment, and more efficient decontamination systems, which are:

Robotic and AI-driven Cleanup

 Robots, AI-driven drones, and automated systems have replaced human workers in high-radiation areas, making it safer and more efficient to decommission reactors and remove contaminated materials.
Advanced Radiation Containment Materials

New materials and nanotechnologies can contain radiation more effectively, allowing some contaminated areas to be rehabilitated faster. Reactor Decommissioning Innovations

Nuclear reactors damaged during the conflict are now being dismantled using new techniques that neutralize radiation on-site, reducing the risk of further contamination.

How have sanctions stopped Russia from continuing its track?

## **Key Players:**

### <u>Russia</u>

Russia has wanted territory and they have wanted Ukraine territory. In February of 2014, they declared war which lasted around 8 years. Russia has conquered an amount of 74,443 or to be more precise Russia has taken 18% of Ukraine's land. It has been the first war in history in which the use of nuclear weapons was evident.

#### <u>Ukraine</u>

Ukraine has been affected in ways like infrastructure damage, humanitarian crisis, displacements and death of residents, physiological impacts, economic disruption, and so many other ways. They have lost around 150,000 people and more than millions have migrated to other countries. United States of America

The United States has been one of the most important countries in all of this war. The USA has been protecting Ukraine from Russian and Chinese threats. The US is also the country that has sent the biggest military help to

### Ukraine.

### <u>China</u>

China it's the biggest supporter of the military, economic, and overall resources of Russia. Since 1970 China and Russia have worked in a team to accomplish a strong military army and to grow in all of the ways possible. If it wasn't for the countries that supported Ukraine, they would have probably lost against Russia and the Chinese people who went to support them.

#### North Korea

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North Korea was one of the people who voted for Russia to continue its attack. They have recently talked to help each other in many ways. North Korea is one of the most powerful countries in nuclear equipment. Some people even argue about whether North Korea helped Russia.

### **UN Actions:**

On March 2, 2023, The UN made a votation in which 146 countries voted. 141 voted to help Ukraine and stop the war while just 5 Russia, Belarus, DPRK (North Korea), Eritrea, Syria, and China voted to continue Russia's Plan. The UN sent military help to Ukraine and also convinced lots of countries to help him.

Since the war started, the UN has sent around 36 million dollars in supplies and support. Many organizations (European Union, United Nations, etc) and countries have joined the Ukrainian side. Russia joined the UN on 06/26/1945, and currently the UN has been recently planning to kick him out because of the trouble internationally that they have caused.

The UN is doing all in its power to stop Russia's threats and to help Ukraine. Is your job to find a solution which the UN is having problems finding.



### **Current Status:**

The war has ended, and both Ukraine and Russia are completely affected. Not only that, but the neighboring countries are also suffering from pollution due to the use of radioactive materials, which slowly spread into the environment. Thanks to the pollution and unsafe living conditions, refugee crises have emerged, and more genetic mutations have increased along with cancer rates. New technologies have emerged to not only reduce human risks, but also manage materials more efficiently, and with fewer risks.

Ukraine managed to <u>recapture</u> almost all of the territory, while Russia still has a tiny part of the country. Meanwhile, Russia continues to threaten Ukrainian cities and <u>block</u> its ports, and Ukraine has <u>stepped up</u> drone defense against the Russian military. Since January 2025, Ukraine has received about <u>\$278 billion</u> in aid, including <u>\$75 billion</u> from the United States, though it warns of <u>donor fatigue</u>. Fighting and air strikes have inflicted over 30,000 <u>civilian casualties</u>, while 3.7 million people are <u>internally displaced</u>, 6.5 million have fled Ukraine, 22 million were affected by radiation, and 14.6 million people <u>need</u> humanitarian assistance.



## **Guiding Questions:**

1. What solutions can be for further problems?

2. Who is accountable for the damages, and how will they be able to repair them?

3. How will you solve the refugee crisis, and make unsafe living conditions safe again?

4. What's the most viable solution for radiation?

5. What will you do to prevent further conflicts between the countries?

6. How will you balance the environment with few or no risks?

7. How will you finance the complete operation?

8. What are the main political, historical, or economic factors which led to the Russia-Ukraine conflict?

9. What methods will you use to contain and clean radioactive materials?

10. How will people be safe while the problem of radiation is still in some parts of Ukraine?

### **Quorum:**

- 1. Russia
- 2. Ukraine
- 3. United States
- 4. China
- 5. North Korea
- 6. Belarus
- 7. Mali
- 8. Nicaragua
- 9. Syria
- 10. Australia
- 11. Austria
- 12. France
- 13. Germany
- 14. Japan
- 15. Malaysia
- 16. Mexico
- 17. United Kingdom
- 18. Sweden
- 19. Poland
- 20. Philippines



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