

Committee: International Atomic Energy Agency

State: Burkina Faso

Agenda Item: Technology Infrastructure for Prevention, Detection,
and Responses Regarding Nuclear Security



Nuclear energy has been a focal point for humanity for decades. With the exponential developments, humanity has been able to make a lot of progress regarding the topic. While progress is exciting, nuclear security shall come with it as well. Any action taken without the needed precautions may result in unwanted incidents. The tragedy of Hiroshima¹ has happened because of several miscalculations regarding the core of the powerplant. Fukushima has also faced a terrible accident² regarding nuclear energy. The point being, every step should be taken carefully and be thought out thoroughly.

On this topic, the Agency has passed many resolutions³ in the past, ensuring safety in development of nuclear energy and all of its sub-categories. Burkina Faso has also started making progress in the topic in the last few years. In Burkina Faso, nuclear science and technology is used to treat cancer, control the population of insect pest, such as the tsetse fly, and improve sheep and goat productivity⁴. Its 2023-2028 CPF identifies 5 priority areas: Nuclear and radiation safety and security, rice productivity, livestock productivity and animal health, integrated pest management, cancer control, diagnosis and treatment⁵. Burkina Faso has also established its first atomic energy agency, this agency will ensure the energy independence of Burkina Faso, the industrialization of the country and facilitate access to electricity throughout the country. A bill has also been passed regarding the support of the IAEA's support on the building of a nuclear power plant. The nuclear power plant will be developed in partnership between Burkina Faso's Ministry of Energy, Mines and Careers and nuclear energy company Rosatom and is due to start construction by 2030⁶. While these are very exciting news, a safe way of development is always the priority. On June 5, on the sidelines of the St. Petersburg International Economic Forum (SPIEF-2024), three memoranda of understanding were

¹<https://world-nuclear.org/information-library/safety-and-security/safety-of-plants/chernobyl-accident>

²<https://world-nuclear.org/information-library/safety-and-security/safety-of-plants/fukushima-daiichi-accident>

³<https://www.iaea.org/about/governance/general-conference/gc67/resolutions>

⁴<https://www.iaea.org/newscenter/news/burkina-faso-enhances-its-nuclear-legal-framework-with-iaea-assistance>

⁵<https://www.iaea.org/newscenter/news/burkina-faso-signs-its-fourth-country-programme-framework-cpf-for-2023-2028>

⁶<https://energycapitalpower.com/burkina-faso-atomic-energy-agency/>

signed between the State Corporation Rosatom and the Ministry of Energy, Mines and Quarries of Burkina Faso⁷. Burkina Faso has also been working with the IAEA to strengthen its nuclear security Framework⁸. All of these developments indicate a strategic and safe approach to nuclear energy.

Burkina Faso would like to talk about how modern technology could help the Agency find answers to questions such as how the agency could ensure the prevention of the adverse impacts of nuclear energy usage. For example, thorium could be one of the best alternatives to uranium in nuclear power plants. Thorium can generate more fissile material than it consumes while fuelling a water cooled or molten salt reactor, and it generates fewer minor actinides than plutonium fuels. It is also thought that the Earth's crust contains more than 3 times thorium than uranium. Another advantage is that they produce less nuclear waste than uranium-fuelled reactors⁹.

To prevent unwanted effects of nuclear energy, more countries should be encouraged to join IRMIS, a system for monitoring radiation levels across the globe, built to prevent accidents. IRMIS provides a mechanism to report and visualise large quantities of environmental radiation monitoring data during a nuclear or radiological emergency. The Agency states it is not an early warning system but instead focuses on providing real-time monitoring of environmental radioactivity and assessment of radiological hazards caused by radioactive materials, emergencies or accidents¹⁰. More countries in the programme would mean more reach, therefore more safety regarding nuclear energy.

Burkina Faso will detail more solutions in the formal session, and will be open to any ideas presented by other delegates. Burkina Faso wishes to find permanent solutions to the problems listed above, and believes that can only be achieved through collaboration.

⁷<https://atommedia.online/en/2024/06/05/rosatom-i-burkina-faso-nachinajut-sotru/>

⁸www.iaea.org/newscenter/pressreleases/iaea-completes-nuclear-security-advisory-mission-in-burkina-faso

⁹<https://www.iaea.org/bulletin/thorium-long-term-potential-in-nuclear-energy#:~:text=Thorium%20boasts%20several%20advantages%20over,minor%20actinides%20than%20plutonium%20fuels.>

¹⁰<https://www.iaea.org/newscenter/news/georgia-becomes-the-50th-member-of-iaeas-international-radiation-monitoring-system>