

Committee: International Atomic Energy Agency (IAEA)

Country: Republic of Romania

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



Like a bridge left unfinished, humanity risks falling into an abyss of energy insecurity as well as environmental collapse without embracing innovation and peace. The Agency, founded in 1957, was established to provide the peaceful use of nuclear energy while preventing its misuse. Over decades, it fostered global cooperation and advanced nuclear energy, becoming the guardian of global nuclear security. Through this backing, every country has the chance to benefit from the Agency, building a sustainable and peaceful future for the next generations. Romania is taking important steps to enhance its nuclear energy capacity as well as receiving financial and technical support of the United States of America to implement the first modular nuclear power plant in Europe. With these steps, Romania aims to strengthen nuclear security and reduce carbon emissions.

Our country currently operates two nuclear power plants: Cernavoda Nuclear Power Plant and the Pitesti Nuclear Power Plant which provided approximately 19 percent of the electricity production in our country. The Cernavoda Power Plant, located on the Black Sea coast, is equipped with two operational CANDU reactors, with plans of expanding its capacity by adding units 3 and 4. In addition, Our country is set to implement Europe's first small modular reactor (SMR) based on NuScale technology, which is expected to enhance its nuclear energy output while reducing carbon emissions. The Pitesti plant, located in Mioveni, plays a crucial role in producing nuclear fuel for the country's power plants and ensuring the smooth operation of the nuclear energy cycle.

Romania has established a strong relationship with the Agency, engaging in a variety of initiatives focused on the development of nuclear safety, security and non-proliferation. Our country has consistently aligned its nuclear safety framework with IAEA standards. In November 2023, IAEA experts commended our country for our commitment to nuclear and radiation safety, recognizing the effective preparations for the deployment of small modular reactors (SMRs). The Agency also suggested enhancing the coordination among government bodies supervising the actions taken regarding radiation sources.¹

Our engagement with the IAEA also extends to nuclear security. In December 2024, an assessment mission (SEDO) to a nuclear power plant in Pitesti was successfully completed, with the team reporting that the plant meets IAEA safety standards. Assessment team observed that the technical knowledge and competence of the facility management, operating personnel, technical staff, as well as their commitment, transparency, and openness to continuous improvement, were vital for ensuring the safety and operational effectiveness of the plant. Our NFP Director emphasized that the SEDO mission provided our plant with valuable recommendations for further improvement, added that they are committed to implement them.²

In December 2024, an International Physical Protection Advisory Service (IPPAS) completed its fourth assessment both the Cernavoda Nuclear Power Plant and the Pitesti Nuclear Fuel Plant in Mioveni. Our power plants supplied approximately 19 percent of the country's energy in 2023, and we are planning to expand this capacity in the future. The team commended for our comprehensive to enhance our nuclear security regime and collaboration among alternate competent authorities in nuclear security. The team also gave recommendations and suggestions as well as they commended some of our nuclear security activities, added that they can serve them to the other IAEA Member States to help strengthen their nuclear security activities.³

In our opinion, our country's commitment to both peace and technological development, particularly in the field of nuclear energy plays a critical role in shaping a sustainable and secure future. While our nation has made significant steps in the peaceful use of nuclear energy, it is essential to continue advancing technological development to ensure our nuclear power plants meet the highest safety and efficiency standards. This includes further investment in the development of Small Modular Reactors (SMRs), which offer a cleaner and more sustainable alternative to traditional nuclear power plants. These reactors are not only vital for our country's energy security but also for our long-term sustainability and global energy security as there are multiple possible threads, especially in a World increasingly threatened by technological challenges.

First of all, education is one of the most efficient ways to improve global energy security and there shouldn't be any age limit to educate people. We believe that the most comprehensive education program is the NORROM project, a five-year initiative aimed at enhancing nuclear safety and security in Romania and worldwide. 83 of 138 events were organized by the IAEA, connecting CNCAN with international experts for technical exchange, guidance and collaboration on training, exercises and development of regulatory development.⁴ We are planning to propose this solution to globalize it by obtaining financial support from financially strong countries.

Secondly, we can propose the creation of a mandatory, global database to track and monitor nuclear activities and related developments in participating countries. This database would allow the Agency to maintain real-time oversight and ensure that all nations are adhering to agreed-upon standards and protocols. Countries found attempting to manipulate or bypass the system could be held accountable through penalties or other measures enforced by the Agency. To ensure fairness and transparency, the development and maintenance of this database could involve neutral third-party nations or trusted international bodies, working in collaboration with the Agency. This collaborative approach would help ensure that the system remains impartial, credible, and effective in promoting global nuclear safety and security. By doing so, we can strengthen international cooperation and accountability while discouraging non-compliance or dishonest practices.

In conclusion, we believe that our country's efforts, particularly of SMRs and increasing collaboration with IAEA, will provide so many things while taking these important steps toward a secure and sustainable energy future with the best technology while considering the other country's needs. By encouraging education, transparent practices, and establishment of a global database for nuclear monitoring, we can pave the way for a future where nuclear energy plays a central role in meeting global energy demands while protecting

our planet for future generations. We call on all nations to join us in embracing these solutions, ensuring a future built on innovation, security, and peace.

References

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