Committee:International Atomic Energy Agency(IAEA)

Country:Jordan

Topic:Technology Infrastructure for Prevention Detection and Responses Regarding

**Nuclear Security** 

School:Emine Örnek High School

Nuclear security involves the steps taken to prevent, detect and respond to unauthorized access, use, or sabotage of nuclear materials and facilities. This topic is extremely important because nuclear materials, if mishandled or falling into the wrong hands, pose significant risks to global security, public health, and the environment. Strengthening technology infrastructure for nuclear security helps prevent nuclear terrorism, reduce the spread of nuclear weapons and ensures that nuclear energy is used safely and responsibly. For us a country situated in a geopolitically sensitive region, improving nuclear security is essential to maintaining regional stability and safeguarding national interests.

As a member state of the IAEA since 1966, Jordan is committed to upholding the agency's standards and collaborating on international efforts to improve nuclear safety and security. We have invested in developing its nuclear infrastructure, including the creation of the Jordan Atomic Energy Commission (JAEC), which oversees all nuclear-related activities within the country. Through partnerships with the IAEA, Jordan has implemented advanced technologies and best practices to bolster its nuclear security measures.

## The main problems regarding this issue are:

**Prevention of Illicit Use:** The misuse of nuclear materials by non-state actors remains a significant global threat. Advanced technology is essential to prevent unauthorized access and trafficking of these materials.

**Crisis Response Mechanisms**: In the event of a nuclear security breach or emergency, having a well-coordinated and technologically supported response system is crucial to minimize damage and restore safety.

**Capacity Building and Training**: Developing skilled personnel and enhancing technological expertise are necessary for maintaining and improving nuclear security infrastructure.

We strongly support global efforts to develop and share advanced technologies for nuclear security. We advocate for the use of modern detection and monitoring systems to improve global nuclear security efforts.

## Fordan's Actions and Achievements:

Collaboration with the IAEA:We are one of the leading countries in the region regarding participation in the IAEA's technical cooperation programs. Between 2018 and 2022, Jordan participated in more than 25 technical cooperation projects organized by the IAEA, training approximately 200 Jordanian scientists and technicians through these initiatives.

Improvements in Border Security:Jordan has deployed advanced radiation detection

devices to enhance border security. In 2020 alone, security checks at Jordan's border crossings detected more than 15 attempts to smuggle suspicious radioactive materials. Active radiation monitoring systems are installed at 12 main border checkpoints, scanning an average of 20,000 vehicles daily.

## **SOLUTIONS:**

IAEA Support for Technological Upgrades: We call on the IAEA to increase technical help for developing countries to acquire advanced detection and monitoring systems, ensuring that all member countries have access to the necessary technology for strong nuclear security.

**Standardized Protocols**: We support the creation of global standards for nuclear security technologies and practices. Standardization ensures consistency and efficiency in implementing security measures across different countries.

**Regional Nuclear Security Centers**: We propose setting up regional centers for nuclear security training and technology sharing. Using facilities like the JRTR, these centers can allow neighboring countries to exchange knowledge and best practices.

In conclusion,we see nuclear security as a shared global responsibility and recognize the important role of the IAEA in encouraging technological progress and strengthening international cooperation. Improving technology for prevention, detection, and response will help the global community tackle nuclear security issues and ensure the peaceful use of nuclear energy. We are committed to working with the IAEA and other member states to contribute to both national and global security goals.