Committee: International Atomic Energy Agency

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

Nuclear security is a cornerstone of global safety, protecting people, the environment, and infrastructure from malicious use of nuclear materials. It refers to the prevention, detection, and response against threats such as terrorism, and illegal trafficking in nuclear energy and radioactive substances. Technology and infrastructure development can help improve nuclear security by allowing rapid identification of threats and effective coordination of responses. France, as one of the leading countries in nuclear energy and a founding member of the International Atomic Energy Agency (IAEA), considers enhancing robust systems to safeguard against nuclear risks important. Advanced technologies such as radiation detection systems, cybersecurity measures, and emergency preparedness frameworks strengthen national and international capacities. Although progress has been made in all three areas, significant challenges maintain in the global setting: ensuring equal access to technologies, harmonizing regulatory frameworks, and combating illegal trafficking networks. These are all basic but crucial issues that underpin the need for collaborative international efforts in enhancing nuclear security infrastructure while promoting technological innovation and capacity building.

France can provide a lot in terms of international contribution to nuclear security regarding technology and infrastructure. France is an active member of the International Atomic Energy Agency (IAEA) and supports efforts in the areas of prevention, detection, and response to threats, including those of nuclear and other radioactive materials. France also was an active participant in the adoption of the Global Initiative to Combat Nuclear Terrorism (GICNT) initiated in 2006 to accelerate the development of Detection Technology and International Cooperation to defeat Nuclear Terrorism. This provided a vital role during the elaboration and implementation process of the International Atomic Energy Agency (IAEA) Nuclear Security Series that elaborated on technical guidelines related to the security of radioactive materials against theft, sabotage, and other forms of illegal trafficking in nuclear materials. Indeed, France is committed, as attested by the leading role it plays within the Nuclear Security Series (NSS), to acting with the international community to develop sophisticated detection systems along with an efficient chain of emergency response. The objective is to impede illegal nuclear transfers, but in this respect, its independence will be above all on state-of-the-art radiation monitoring systems in France itself at crucial points of entry by air or sea. It is also very active in its cooperation with the International Atomic Energy Agency (IAEA) in the domain of technical expertise and means for capacity-building programs, training workshops, and simulations with a view to helping countries build up their capacities in detection and response. Its commitment to cybersecurity in the nuclear domain is exemplary. Faced with this growing threat, France initiated, together with the IAEA, the frameworks for nuclear installation cybersecurity. These past acts underpin even more the leadership of France in promoting global nuclear security and her determination to leverage technology and infrastructure against the emergence of new threats.

Pledged for the development and implementation of advanced technologies and resilient infrastructures, France took every measure to improve nuclear security. France is one of the leading countries in nuclear energy and a founding member of the International Atomic Energy Agency (IAEA), which undertook an active role in the prevention, detection, and response against the threats of nuclear terrorism, illicit trafficking, and sabotage. Its policies outline the development of international cooperation, essentially via the International Atomic Energy Agency (IAEA), with the quest to achieve safety in the handling of nuclear and other radioactive materials. France does believe in modern border and port detection systems as well as deploying equipment for the monitoring of radiation levels in sensitive areas against illicit trafficking in these materials. The [Autorité de sûreté nucléaire](https://en.wikipedia.org/wiki/Autorit%C3%A9_de_s%C3%BBret%C3%A9_nucl%C3%A9aire) (ASN) is the agency at home that enforces stringent regulations concerning the safety of both nuclear installations and materials. Second, France pays much attention to cybersecurity measures, realizing those are the most relevant for the protection of nuclear infrastructure from cyberattacks. This means periodic security testing to build strong firewalls and international cooperation for the exchange of relevant experience and best practices. It strongly supports the International Atomic Energy Agency (IAEA)'s activities for capacity-building through technical assistance and training in countries with particular needs for infrastructure and technology in this field. France promotes the establishment of international databases and intelligence-sharing mechanisms on nuclear materials in order to highlight potential threats as early as possible. In this regard, France remains attached to emergency preparedness and response structures that would make for mobilization in cases of a security breach. France underlines in its policy the importance of innovation development, enlarged multilateral cooperation, and equal access to advanced technologies in the field of nuclear security with regard to an effective response to current global challenges.

The comprehensive and cooperative approach of France relies on technology, infrastructure development, and international partnerships to effectively promote global nuclear security. France insists on enforcing the Nuclear Security Innovation Network driven by the International Atomic Energy Agency (IAEA) for studying new technologies and performing advances in systems of radiation detection, using artificial intelligence in countering threats, and drones that monitor the real situation at the nuclear facilities. It would connect research institutions, private industries, and governments in the development of new solutions right to the market. As the delegate of France, we propose under the International Atomic Energy Agency (IAEA), a Global Nuclear Security Coordination Hub that allows real-time data to be shared and analyzed, combining national monitoring systems at the center, enabling on-the-spot detection of illegal movements of nuclear material, hence improving international coordination. It can also provide predictive analytics on possible security breaches or vulnerabilities before they occur. France has proposed an IAEA Cybersecurity Standards Framework to address the looming dangers of cyber-attacks on nuclear facilities. The initiative would institute global benchmarks on cybersecurity measures, training of nuclear facility personnel, and also cybersecurity drills as a way of assessing the robustness of an attack. Dedicated regional cybersecurity centers would also contribute to the elaboration of specific regional know-how and provide support at the grassroots level to needy nations. Lastly, France insists that the capacity-building programs have to be built for sufficient availability of nuclear security technology and expertise. France wants Regional Training Centres on Nuclear Security, with support from the IAEA, to give training in hands-on knowledge relating to prevention, detection, and response. These centers would also arrange regular workshops and simulation exercises to build better emergency preparedness. France is also proposing the Nuclear Security Development Fund financing which will be provided through international contributions for use in helping developing countries purchase advanced detection systems and build better infrastructure for nuclear security. With this, France believes this will be a safer world where technology and cooperation will respond effectively to the challenges of nuclear safety.

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