

# Nuclear Security

## Objective

*To promote adherence to relevant legally and non-legally binding international instruments to enhance nuclear security globally. To assist States in establishing, maintaining and sustaining national nuclear security regimes for nuclear and other radioactive materials, including during transport, and associated facilities used for peaceful purposes. To play the central role of facilitating and enhancing international cooperation and increasing visibility and awareness through communication on nuclear security.*

## The Convention on the Physical Protection of Nuclear Material and its Amendment

The Agency continued encouraging universal adherence to and effective implementation of the Convention on the Physical Protection of Nuclear Material (CPPNM) and its Amendment (A/CPPNM) and provided technical and legislative assistance in this regard, upon request. An additional four States adhered to the A/CPPNM in 2022.



*The first Conference of the Parties to the Amendment to the Convention on the Physical Protection of Nuclear Material was held in Vienna from 28 March to 1 April 2022.*

## Nuclear Security Guidance

One new publication in the IAEA Nuclear Security Series (NSS) was issued in 2022, bringing the total number of publications in the NSS to 43. In addition, 2 draft guidance publications were approved for publication, and 15 others, including 4 revisions of existing publications, were at various stages of development during 2022. In total, 32 NSS publications are now available in Arabic, French, Russian and Spanish, including all NSS publications at the level of Nuclear Security Fundamentals, Recommendations and Implementing Guides.

## Needs Assessment and Capacity Building

The Agency conducted 18 Integrated Nuclear Security Support Plan (INSSP) missions, 3 INSSP finalization missions, 8 awareness-raising missions targeting decision makers, and 1 INSSP preparatory mission in 2022. The total number of States with approved INSSPs remained at 92.

The Agency conducted 140 training activities on nuclear security topics, including 17 webinars, for more than 4000 participants from 154 States. The Agency held four Schools on Nuclear Security, including one for Marie Skłodowska-Curie Fellowship Programme fellows that was attended by 68 participants from 46 States. The first national School on Nuclear Security conducted in Portuguese took place in 2022, implemented in cooperation with the Government of Brazil through the Nuclear and Energy Research Institute.

Two new Member State institutions were designated as Collaborating Centres in different areas of nuclear security in 2022, for a total of ten such Collaborating Centres. Twenty-four training-related Agency events in nuclear security were hosted by Collaborating Centres.

## Information and Computer Security

In 2022, the Agency conducted 45 computer security-related events, with the majority focusing on national-level support for computer security regulations/inspections and computer security exercises. The Agency also continued preparing for the International Conference on Computer Security in the Nuclear World: Security for Safety, planned to be held in June 2023.

## Risk Reduction

During 2022, 33 States benefited from comprehensive assistance to ensure the safe and secure management of high activity disused radioactive sources, including their repatriation or removal to authorized recipients.

The Agency assisted two Member States with physical protection upgrades at nuclear facilities. The Agency also assisted one Member State with a transportation security upgrade. These upgrades were complemented by specialized technical training to support the operation, maintenance and sustainability of physical protection equipment, systems and measures for detection, delay and response.

## Major Public Events

The Agency provided support for nine major public events in eight Member States in 2022, including the FIFA World Cup 2022 in Qatar and COP27 in Egypt. The Agency also loaned 911 items of radiation detection equipment.



*Mobile-Integrated Nuclear Security Network training for the implementation of nuclear security measures at COP27 in Egypt, November 2022.*

## Incident and Trafficking Database

In 2022, States reported 146 incidents to the Incident and Trafficking Database. Five of the reported incidents related to trafficking, three of which involved scams (including attempted scams). There were 23 reported incidents in which intent to engage in trafficking or malicious use could not be determined. There were also 118 reported incidents in which material was out of regulatory control but that were unrelated to trafficking, malicious use or scams.

## Nuclear Security Fund

From 1 January to 31 December 2022, the Agency received contributions to the Nuclear Security Fund from 12 Member States and other donors. The total revenue<sup>1</sup> in 2022 was €29 million. In implementing activities in 2022, the Agency utilized funds from contributions received in 2022 as well as from previous contributions, notably those received in 2021 from 15 Member States. The Agency also used funds received in earlier years, including those contributed by the European Union.

<sup>1</sup> For the purposes of this report, 'revenue' refers to funds that have been recognized as revenue or deferred revenue in accordance with the International Public Sector Accounting Standards.

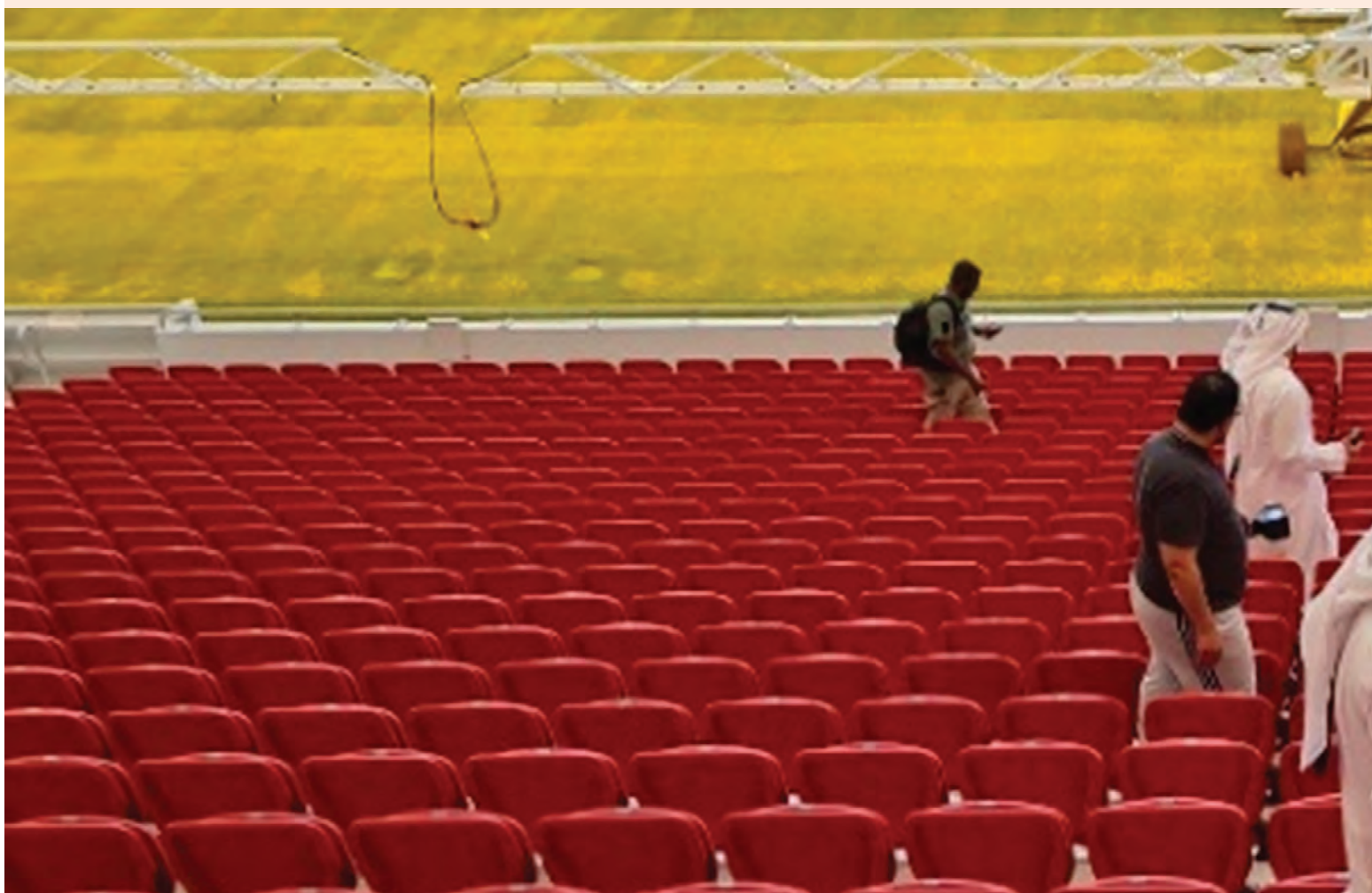


## Supporting Nuclear Security at the FIFA Men's World Cup 2022 in Qatar

The organization of a major public event, such as a sporting event or high-level political meeting, presents unique security challenges, including possible threats involving nuclear or other radioactive material. In the run-up to the FIFA Men's World Cup held in Qatar at the end of 2022, the Agency helped the country to integrate nuclear security measures into its overall security plans for that large-scale event. With over 1.4 million people visiting the country during the World Cup, ensuring the optimum prevention and security measures to guard against the potential use of nuclear or other radioactive material in a criminal or terrorist act was of crucial importance to protecting people and the environment.

Working with Qatar's National Committee for the Prohibition of Weapons (NCPW) throughout 2022, the Agency and international experts provided comprehensive training to national counterparts on developing and implementing nuclear security measures and on responding to nuclear security events and related emergencies. The Agency organized two national workshops to enhance participants' awareness and understanding of the planning and execution of nuclear security measures for major public events. Additionally, representatives from different ministries and governmental authorities responsible for the secure planning of major public events were also trained in responding to criminal or intentional unauthorized acts involving nuclear or other radioactive material. In total, around 50 participants were trained in preparation for the World Cup.

"The Agency's experience in supporting nuclear security measures at major public events was adapted to Qatar's needs," said Elena Buglova, Director of the Division of Nuclear Security. "During



the training sessions, a team of experts worked with national authorities. Through scenario-based group discussions, hands-on activities and practical field exercises, participants learned to operate radiation detection equipment and implement the standard operating procedures developed to support countries organizing major public events.”

As part of its technical support, the Agency loaned over 120 radiation detection instruments – including personal radiation detectors, radionuclide identification devices and portable backpack-type detectors – to Qatar. These were used by the trained governmental authority staff in stadiums and other strategic locations.

“For the first time, the world’s biggest football tournament was held in the Middle East, and it was the first FIFA World Cup where the stadiums were so intricately linked, and they welcomed crowds of fans at the same time,” said Rashid Al-Nuaimi, Acting Chairman of the NCPW. “This safety and security challenge led the NCPW to turn to the IAEA for assistance. We are looking forward to future cooperation and support, especially in nuclear security systems and measures.”

The Agency regularly provides nuclear security support to Member States for major public events, building on two decades of experience starting with support for Greece in connection with nuclear security arrangements for the Athens Olympic Games in 2004. By the end of 2022, the Agency had worked with 43 countries to counteract potential nuclear security threats.

*The Agency provided Qatar with equipment and training to support the country’s efforts to strengthen nuclear security measures in preparation for the FIFA Men’s World Cup 2022.*

