



IAEA

International Atomic Energy Agency

NUCLEAR SECURITY

IAEA: Strengthening
a **global response** to a **global threat**



THE WORLD TODAY

The threat of nuclear terrorism is real. Individuals and groups could acquire and use nuclear and other radioactive material with malicious intent. States have national responsibilities to combat this global threat by, inter alia, securing vulnerable material, combating illicit trafficking and preventing malicious acts.

The IAEA is working to protect people, property, society and the environment against the malicious use of nuclear and other radioactive material.

IN A NUTSHELL

Nuclear security is the means and ways of preventing, detecting and responding to theft, sabotage and unauthorized access to, or illegal transfer of, nuclear and other radioactive material, as well as associated facilities.

WHAT ARE POSSIBLE SCENARIOS?

Risks addressed by States are:

- *Theft of nuclear material, including that used in nuclear weapons or for use in improvised explosive devices*
- *Theft of radioactive material for use in radiological dispersal devices*
- *Sabotage of nuclear installations or transport*

WHAT IS THE BIGGEST RISK?

- *The State that does not recognize the threat of nuclear terrorism*
- *The State that does not take preventive action*
- *The State that is complacent*



BOMBEROS

The **IAEA** helps to ensure that measures are taken to control and protect nuclear and other radioactive material, as well as facilities, from falling into the wrong hands.



THE ROLE OF THE IAEA

The IAEA delivers training, peer reviews and advisory services, and equipment to States, and establishes international guidance and standards on improving nuclear security.

Given the high number of possible targets and scenarios, nuclear security demands a comprehensive approach. With help from the IAEA, States prevent people from gaining access to material and using it with malicious intent, detect and interdict illicit trafficking and other illegal activities involving nuclear and other radioactive material, and respond to malicious acts or threats rapidly and in a coordinated manner.

If there is a nuclear related emergency, States must be prepared and equipped to respond to any scenario. The IAEA's Incident and Emergency Centre is on call to help. It coordinates round-the-clock specialized support and provides assistance to States in the event of an emergency, including nuclear security incidents.

IAEA nuclear security activities include:

- *Setting up of internationally accepted guidance and standards that are used as benchmarks for nuclear security and providing for their application through:*
 - Information exchange and analysis
 - Education and training and HR development programmes
 - Establishment and implementation of Integrated Nuclear Security Support Plans (INSSPs) for individual countries with multiyear work plans and coordination functions
 - Research and development
 - Provision of peer reviews and advisory services to assess effectiveness of national nuclear security infrastructure and promote confidence building
- *Threat reduction*
- *Promotion of the ratification and implementation of international legal instruments, including the CPPNM and its 2005 Amendment*





Guards, guns and gates are no longer enough.

MAJOR PUBLIC EVENTS

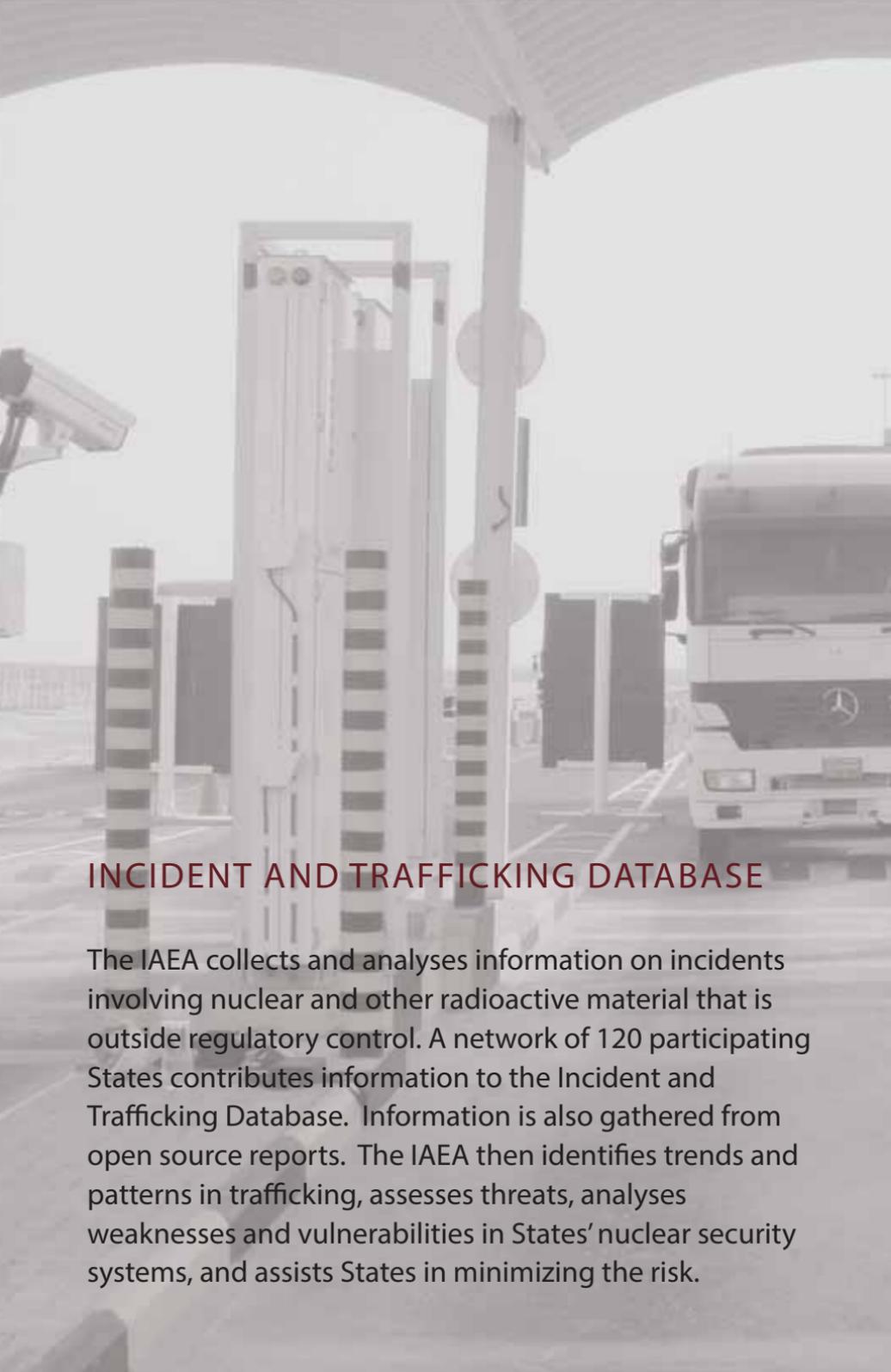
With a large number of participants, the scale of major public events makes them potential targets.

The IAEA helps States plan, train and equip themselves to address this reality.

The IAEA has been involved in ensuring the security of the following major public events:

- XXVIII Olympic Games, Greece
- FIFA World Cup, Germany
- XV Pan American Games, Brazil
- XXIX Olympic Games, China
- APEC Summit, Peru
- IX South American Games, Colombia
- IX World Cup, South Africa
- XIX Commonwealth Games, India
- FIFA U-20 World Cup, Colombia
- XVI Pan American Games, México
- G-20, Mexico
- Africa Cup of Nations, Gabon
- UEFA EURO 2012, Poland and Ukraine





INCIDENT AND TRAFFICKING DATABASE

The IAEA collects and analyses information on incidents involving nuclear and other radioactive material that is outside regulatory control. A network of 120 participating States contributes information to the Incident and Trafficking Database. Information is also gathered from open source reports. The IAEA then identifies trends and patterns in trafficking, assesses threats, analyses weaknesses and vulnerabilities in States' nuclear security systems, and assists States in minimizing the risk.





IAEA Assistance to Reduce the Risk of Nuclear Terrorism includes:

- *Accountability and control of nuclear and radioactive sources*
- *Facility and transportation security upgrades*
- *International legal instruments support*
- *Nuclear security needs assessment, analysis and coordination*



PARTNERS IN NUCLEAR SECURITY

- UN Security Council Resolution 1540 Committee
- UN Counter Terrorism Implementation Task Force
- United Nation's Office on Drugs and Crime
- International Civil Aviation Organization
- International Criminal Police Organization
- International Maritime Organization
- Sub-Committee of Experts on the Transport of Dangerous Goods
- United Nations Interregional Crime and Justice Research Institute
- Universal Postal Union
- World Customs Organization
- Organization for Security and Cooperation in Europe
- Europol
- G8 Global Partnership
- Global Initiative to Combat Nuclear Terrorism
- Global Threat Reduction Initiative
- The World Institute for Nuclear Security



Objective and Essential Elements of a State's Nuclear Security Regime

IAEA international guidance on nuclear security covers issues such as security culture, design basis threat methodology and nuclear forensic methodology.

Publications are issued in the following categories:

- *Nuclear Security Fundamentals (objectives, concepts, principles)*
- *Recommendations (best practices that should be adopted by Member States)*
- *Implementing Guides (further elaboration of recommendations)*
- *Technical Advice (Reference Manuals, Training Guides, Service Guides)*



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Nuclear security evaluation missions and technical visits are important tools in helping States assess their nuclear security needs and devising plans of action.

International Nuclear Security Advisory Services

help identify a State's broad nuclear security requirements and the measures needed to meet them.

International Physical Protection Advisory Services

serve as the IAEA's chief tool for evaluating existing physical protection arrangements in States.

SSAC Advisory Services

provide States with recommendations and suggestions for improving their systems for accountancy and control of nuclear material.

International Teams of Experts

are a primary mechanism in assisting States to implement international legal instruments relevant to enhancing protection against nuclear terrorism.

Integrated Regulatory Review Services

help States to improve the effectiveness of national regulatory bodies and to implement national safety legislation and regulations.

Integrated Nuclear Security Support Plans

deliver a holistic approach to nuclear security capacity building.



A large industrial facility, likely a nuclear power plant, with a red floor and white machinery. The image is split into two horizontal sections. The top section shows a person in a yellow shirt and blue pants standing on a red platform, looking at a large white cylindrical component. The bottom section shows a close-up of a large white cylindrical component with a corrugated surface, mounted on a white metal frame. The background is a large industrial building with a red floor and white walls. The text is overlaid on the top section of the image.

A globally accepted international framework for nuclear security is essential.

The **IAEA sees** the way forward as building a sustainable nuclear security infrastructure and culture, harmonizing approaches and recognizing the synergies between security, safety and safeguards.

Programme In Numbers (2002–2012)

Funding received: \$200+ million

Training provided: 500+ workshops and courses to over 13 800 individuals from 120 States

Field visits conducted: 200+ to more than 350 sites

ITDB incidents confirmed: 2331 (since 1995)

Research reactor fuel repatriated: 1850+ kg

Radioactive material secured:
6000+ sources in more than 35 States

Radioactive sources repatriated: 170+ to supplier States

Physical protection upgrades conducted:
100+ sites in 34 States

Detection equipment provided:
3300+ instruments to 61 States

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For more information visit www.iaea.org

