



factsheet

## Radiological Source Safety and Security

Source safety and security relates to the prevention, detection, and response to, criminal or intentional unauthorized acts involving or directed at radioactive material, associated facilities, and activities.



Prior to the terrorist attacks of 9/11 it was widely considered that radioactive material was self-protecting and that the use of radioactive materials in terrorist acts was beyond scope or possibility of individuals. This is no longer the case and a growing body of rules, regulations and guidance has been developed to ensure that security is maintained and that the risks of radioactive material being used in a radiological dispersal device (RDD) is minimized.

## Regulations and Standards

The primary responsibility for security rests with national governments but the IAEA has a role assisting in the development of policies and regulations that support Member States in meeting their obligations.

The IAEA Code on Safety & Security of Radioactive Sources provides an overview of this topic along with publications such as Nuclear Security Series (No 20) Nuclear Security Fundamentals. IAEA Nuclear Security Plans have been developed post 2002. The current Plan covers the period: 2014 – 2017.

## U.S. Nuclear Regulatory Commission (NRC)

In the United States the Nuclear Regulatory Commission (NRC) has overall responsibility for formulating policy and regulations governing radioactive material including licensing. In 2014 the NRC concluded a 10-year development program that aimed to improve security resulting in Title 10 of the Code of Federal Regulation (Part 37) that establishes up-to-date security obligations on licenced users of radioactive materials in the United States.

To support the implementation of Part37 the NRC has issued two guidance documents; NUREG 2155 (Implementation) and NUREG 2166 (Best Practice ).

## Security and Safety

The terms security and safety are often used interchangeably but it is important that the differences between security and safety requirements are understood and recognized. Measures need to be designed and implemented in an integrated manner so that security measures do not compromise safety and safety measures do not compromise security.

## Developments

The security of radioactive sources is a topical, dynamic and evolving subject involving the IAEA, national regulators and a growing number of other interested parties. The International Irradiation Association, as an NGO, has access to, and engages with, the IAEA and a wide range of organizations in order to share the operational experience of its members so that risk based security improvements can be developed and implemented.