



The physical protection of nuclear materials and

ionizing radiation sources in Chad.





The Chadian Agency of Radiation Protection and Nuclear Security (ATRSN) is the regulatory authority for radiation protection and nuclear security in the Republic of Chad. It was created by Law No. 002 / PR / 2008 on Radiological Safety, Nuclear Security and Guarantees. Chapter 4 of the Act sets out the conditions and obligations for ensuring the physical protection of nuclear substances and ionizing radiation sources.





Obligation of the State and of establishments using nuclear materials.





In Chad, the State ensures physical protection of radioactive substances during importation, exportation, transit or transport in accordance with international requirements.

Therefore, the Government assigned to the ATRSN the responsibility:

To establish sustained cooperation in this field with the other Member States and the IAEA

In order to maintain rigorous control of movement of nuclear substances. In the case of lost, theft or diversion of a radioactive source or nuclear material, the licensee should inform the ATRSN and the gendarmerie or police authorities within a period of 24 hours.





The licensee should therefore put in place a system for the physical protection of radioactive substances and ionizing radiation sources. Any transfer of radioactive substance or ionizing radiation sources may only take place between right persons authorized by the ATRSN.

The transmission of confidential information on measures of Physical Protection to an unauthorized person is prohibited in Chad.

The above-mentioned Act clearly identifies the ATRSN as the competent authority and assigns its role and responsibility to regulate activities involving ionizing radiation sources and radioactive substances.





Therefore, it is responsible for:

- Inspect installations and activities involving ionizing radiation.
- Issuing, Renewal, Modify, Suspend or Cancel;
- Ensure, in collaboration with relevant institutions, of compliance with international legal instruments relating to nuclear safety and security;
- Define with the institutions concerned the threat in the field of Nuclear Security;
- ATRSN coordinates with the institutions concerned all activities related to the implementation of a national strategy to regain control of orphan sources;
- This is subject to the discretion of the Government.





National Register of Ionizing Radiation Sources





According to the national inventory of ionizing radiation sources carried out between 2013 and 2015, Chad has recorded 134 sources and distributed as following:

Category II, III, IV and V sources are used in Chad:

Category II: 10

Category III: 14

Category IV: 62

Category V: 48

These radioactive sources are recorded in the RAIS 3.3 Web system and periodically updated. Administrative and technical measures implemented in Chad for physical protection include duly signed and confirmed authorizations, video surveillance, and dual key system held by different persons and the presence of law enforcement agencies all around the sites.





REFERENCES





Law n ° 002 / PR / 2008 of 06 January 2009 on Radiological Safety, Nuclear Safety and Guarantees;
Decree No. 571 / PR / PM / MPE / 2012 of 23 April 2012 on the organization and operation of the Chadian Agency for Radiation Protection and Nuclear Safety;

- Decree No. 572 / PR / PM / MPE / 2012 of 23 April 2012 Establishing the protection of workers, patients, the public and the environment from the harmful effects of ionizing radiation, nuclear safety and security;

- Order No. 159 / PR / PM / MPE / SG / ATRSN / 2015 of 11 December 2015 laying down the arrangements for the transport of radioactive sources and nuclear material in Chad.











THANK YOU ATTENTION