

Translated from French

OFFICIAL GAZETTE OF THE ALGERIAN REPUBLIC No. 42

11 Ramadhan 1435

9 July A.D. 2014

Presidential Decree No. 14-195 of 8 Ramadhan 1435 (6 July A.D. 2014) on the provisions on nuclear security governing the physical protection of nuclear installations, nuclear material and the security of radioactive sources.

The President of the Republic,

On the basis of the report of the Minister of Energy,

In view of the Constitution, in particular articles 77 (8) and 125 (1);

In view of the Treaty on the Non-Proliferation of Nuclear Weapons, signed in New York on 1 July 1968 and the accession of the People's Democratic Republic of Algeria to the Treaty through Presidential Decree No. 94-287 of 15 Rabie Ethani 1415 (21 September A.D. 1994);

In view of the agreement between the People's Democratic Republic of Algeria and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons, signed in Algiers on 30 March 1996 and ratified through Presidential Decree No. 96-435 of 20 Rajab 1417 (1 December A.D. 1996);

In view of the Convention on the Physical Protection of Nuclear Material, opened for signature in Vienna and New York on 3 March 1980 and ratified, subject to a reservation, through Presidential Decree No. 03-68 of 15 Dhou El Hidja 1426 (16 February A.D. 2003);

In view of the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, adopted in Vienna on 26 September 1986 and ratified, subject to a reservation, through Presidential Decree No. 03-367 of 27 Chaâbane 1424 (23 October A.D. 2003);

In view of the Convention on Early Notification of a Nuclear Accident, adopted in Vienna on 26 September 1986 and ratified through Presidential Decree No. 03-368 of 23 October 2003;

In view of the Convention on the Physical Protection of Nuclear Material, adopted in Vienna on 8 July 2005 and ratified, subject to a reservation, through Presidential Decree No. 07-16 of 14 January 2007;

In view of the International Convention for the Suppression of Acts of Nuclear Terrorism, opened for signature at United Nations Headquarters in New York on 14 September 2004 and ratified, subject to a reservation, through Presidential Decree No. 10-270 of 26 Dhou El Kaada 1431 (3 November A.D. 2010);

In view of Ordinance No. 66-156 of 8 June 1966 (Amended and Completed) on the Criminal Code;

In view of Ordinance No. 95-24 of 30 Rabie Ethani 1416 (25 September A.D. 1995) on the protection of public property and the security of persons responsible for ensuring that protection;

In view of Act No. 04-20 of 13 Dhou El Kaada 1425 (25 December A.D. 2004) on the prevention of major risks and the management of catastrophes in the context of sustainable development;

In view of Decree No. 83-373 of 28 May 1983 on the powers of walis in relation to security and public order;

In view of Decree No. 84-105 of 12 May 1984 on the establishment of safety perimeters around facilities and infrastructure;

In view of Decree No. 84-385 of 22 December 1984 on measures to protect facilities, structures and means;

In view of Decree No. 84-386 of 22 December 1984 on the establishment and remit of the National Commission for the Classification of Sensitive Matters;

In view of Decree No. 84-387 of 22 December 1984 on measures to protect classified documents;

In view of Decree No. 84-388 of 22 December 1984 on the accreditation of personnel required to consult classified information and documents;

In view of Presidential Decree No. 96-436 of 20 Rajab 1417 (1 December A.D. 1996) (Amended and Completed) on the establishment, organization and functioning of the Atomic Energy Commission;

In view of Presidential Decree No. 99-86 of 29 Dhou El Hidja 1419 (15 April A.D. 1999) (Amended and Completed) on the establishment of nuclear research centres;

In view of Presidential Decree No. 05-117 of 2 Rabie El Aouel 1426 (11 April A.D. 2005) (Amended and Completed) on protection measures against ionizing radiation;

In view of Presidential Decree No. 05-119 of 2 Rabie El Aouel 1426 (11 April A.D. 2005) on radioactive waste management;

In view of Presidential Decree No. 12-87 of 4 Rabie Ethani 1433 (26 February A.D. 2012) on the establishment, organization and functioning of the Nuclear Security Training and Support Centre;

In view of Presidential Decree No. 14-154 of 5 Rajab 1435 (5 May A.D. 2014) on the appointment of members of the Government;

Hereby decrees:

CHAPTER 1

PURPOSE AND SCOPE

Article 1. The purpose of the present decree is to establish the provisions on nuclear security intended to govern the physical protection of nuclear installations, nuclear material and the security of radioactive sources during storage, use and transport.

Art. 2. For the purposes of the present decree, are hereby defined:

- **Quality assurance:** Policies and programmes on quality management aimed at ensuring that requirements regarding physical protection are met.
- **Physical barrier:** A fence, wall or other similar obstacle designed to delay penetration and complete the access control system.
- **Categories of nuclear material:** Classification of nuclear material as defined in the Convention on the Physical Protection of Nuclear Material and Nuclear Facilities.

- **Categories of radioactive sources:** Classification of radioactive material as defined in the Code of Conduct on the Safety and Security of Radioactive Sources.
- **Defence in depth:** Concept used in the design of physical protection systems whereby aggressors must overcome or circumvent multiple obstacles, which may be of the same or a different nature, to reach their target.
- **Intrusion detection:** Detection of an intruder by a guard or a system composed of one or several sensors, a mode of transmission and a control panel for raising the alarm.
- **Unauthorized removal:** Theft of nuclear material or radioactive sources or their obtainment by other unlawful means.
- **Storage:** The holding of radioactive sources in a facility that provides for their containment with the intention of retrieval.
- **Operator:** Any individual or legal person authorized to conduct one or more activities within the scope of the present Decree.
- **Sensitive information:** Information in any format, including digital, whose unauthorized divulgence, amendment, modification, destruction or rejection could compromise nuclear security.
- **Nuclear facility:** Facility (including associated buildings and equipment) in which nuclear material is produced, processed, used, handled, stored or disposed of, if damage to or interference with such facility could lead to the release of significant amounts of radiation or radioactive material.
- **Physical protection measure:** Element or combination of elements designed to ensure the protection of radiological and nuclear facilities or the protection of nuclear and other radioactive material.
- **Design basis threat:** Describes the features and characteristics of potential insider and external adversaries who might attempt unauthorized removal of nuclear (and other radioactive material) or sabotage on the basis of which a physical protection system is designed and evaluated.
- **Safety perimeter:** Boundary delimiting a land, aerial or maritime area where occupation, movement or any activity in general is regulated.
- **Central security station:** Site that ensures the continuous and complete recording of alarms, assessment of situations and communication with guards, the facility head and relevant security services.
- **Sabotage of nuclear and/or radiological facilities:** Any deliberate act directed against a nuclear facility or nuclear material in use, storage or transport which could directly or indirectly endanger the health and safety of personnel, the public or the environment by exposure to radiation or release of radioactive substances.
- **Nuclear security:** Measures to prevent, detect and respond to the theft, sabotage, illicit transfer of and unauthorized access to nuclear or other radioactive material or associated facilities and any other malicious act involving such material and facilities.
- **Radioactive source:** Radioactive material that is permanently enclosed in a capsule or fixed in solid form and is not exempt from regulatory oversight. This term also encompasses any radioactive material that is released if the radioactive source leaks or is ruptured, but not material that has been enclosed for permanent disposal or nuclear material that is a part of the combustion cycle of research or power reactors.

- **Physical protection system:** Set of integrated physical protection measures designed to prevent the commission of a malicious act.
- **Safety system:** Important protection system designed to ensure the safe shutdown of a reactor or the evacuation of residual heat from the core or to limit the repercussions of anticipated operational occurrences and design basis accidents.
- **Prevention system:** Set of organizational and technical provisions to prevent events that may compromise security and limit the consequences of such events.
- **Transport:** International or national transport of nuclear or other radioactive material by any means, from its departure from the sending facility to its arrival at the receiving facility.
- **Controlled area:** Limited access area of nuclear facilities, surrounded, at a minimum, by the safety perimeter on the outside and the fence around the protected area on the inside.
- **Internal area:** Area within a protected area where Category I nuclear material is used and/or stored.
- **Protected area:** Monitored area surrounded by a physical barrier that contains Category I or II nuclear material and/or vital areas.
- **Vital area:** Area within a protected area that contains equipment, systems, devices or nuclear material whose sabotage may lead directly or indirectly to unacceptable radiological consequences.

Art. 3. The provisions on nuclear security governing the physical protection of nuclear facilities, nuclear material and the security of radioactive sources aim to prevent, inter alia:

- The sabotage of nuclear and/or radiological facilities;
- The unauthorized removal of nuclear material;
- The unauthorized removal of radioactive sources;
- Malicious acts, such as the modification, deterioration or dispersion of nuclear and other radioactive material;
- Attacks against nuclear facilities or attacks involving nuclear or other radioactive material.

Art. 4. The categorization of security levels applicable to nuclear material is set out in annex I of the present decree. The categorization of radioactive material is set out in annex II of the present decree.

CHAPTER 2

COMMON PROVISIONS

Section 1

Physical protection system and design basis threat

Art. 5. The physical protection system shall be based on a study that incorporates the assessment of the design basis threat and the risk analysis.

The design basis threat shall be determined through an assessment of the intentions and means of individuals or groups who may constitute a security threat. That determination shall be used to set the appropriate level of physical protection measures.

Art. 6. The Atomic Energy Commission, in conjunction with the relevant authorities and security services, shall assess the impact of malicious acts in the context of the design basis threat in order to determine which nuclear and other radioactive material, facilities and associated equipment to protect against sabotage.

Art. 7. The design basis threat shall be reassessed regularly, making sure to account for the impact of any modification of the threat on the physical protection levels to be achieved and on the methods to employ to that end.

Art. 8. The measures to counter the design basis threat shall be incorporated into the planned protection provisions in accordance with Ordinance No. 95-24 of 30 Rabie Ethani 1416 (25 September A.D. 1995) on the protection of public property and the security of persons responsible for ensuring that protection.

Section 2

The general terms and conditions governing the physical protection of nuclear facilities, nuclear material and the security of radioactive sources

Art. 9. Operators shall protect the nuclear material and radioactive sources under their responsibility against all malicious acts involving unauthorized removal or sabotage. That protection shall extend to facilities and all systems and associated equipment whose sabotage may lead to harmful radiological consequences for personnel, the public, property and the environment.

Art. 10. Operators shall put in place a physical protection system consisting of prevention, deterrence, detection, delay and response measures to effectively counter all malicious acts targeting nuclear facilities, nuclear material and radioactive sources.

Art. 11. The physical protection system shall be based on the principle of defence in depth and shall be implemented through administrative and technical measures, including physical barriers. The system shall be designed by the operator and submitted to the Atomic Energy Commission for approval, subject to consultation with the relevant security services.

Art. 12. The entire physical protection system shall be documented and underpinned by a quality assurance programme aimed at providing sufficient guarantees of respect for nuclear security requirements.

Art. 13. Operators shall maintain a prevention system for the physical protection of the nuclear material, nuclear facilities and radioactive sources for which they are responsible that is commensurate with the threat and risk levels.

Art. 14. Operators shall design the prevention system and submit it to the Atomic Energy Commission for approval, subject to consultation with the relevant security services. The system shall be in keeping with the guidelines of the emergency plan of which it is functionally a part.

Art. 15. The physical protection system is a confidential document that is regularly updated and approved through the aforementioned procedure.

Art.16. Operators shall be required to conduct annual assessments of the entire physical protection system as implemented, implementation procedures and intervention reports by security guards with a view to determining its reliability and effectiveness and, where necessary, remedial measures. The reports of these assessments shall be made available to the Atomic Energy Commission and relevant security services as part of physical protection.

Art. 17. Operators shall be required to periodically organize exercises to test and assess the system and report back to the Atomic Energy Commission and relevant security services.

CHAPTER 3

TRAINING, QUALIFICATIONS AND REDEPLOYMENT OF HUMAN RESOURCES

Art. 18. Operators shall assign qualified personnel to tasks relating to the protection of nuclear material, nuclear facilities and the security of radioactive sources, as well as ensure that they receive in-service training.

The qualifications of personnel responsible for nuclear security shall be verified by the Atomic Energy Commission.

Art. 19. Personnel assigned to nuclear security tasks, including those responsible for the design, functioning and maintenance of physical protection systems, shall receive specialized training to upgrade their skills for redeployment.

CHAPTER 4

ACCREDITATION AND CONTROLLED ACCESS TO NUCLEAR FACILITIES

Art. 20. Only accredited personnel shall have access to:

- Nuclear facilities;
- The security system of nuclear facilities;
- Nuclear material;
- Physical protection systems;
- Sensitive information.

Art. 21. Operators shall set up an access control system for:

- The various areas of the facility;
- The physical protection systems;
- Protected computer systems.

The access control system shall be approved by the Atomic Energy Commission.

Art. 22. The security and access control system shall include, inter alia:

- Security patrols;
- The placement of physical barriers;
- The establishment of an identification and registration system;
- The installation of secure locking systems for the various areas and systems;
- The installation of a central security unit equipped with a detection, alarm, signal and registration system;
- Diversified and redundant communication systems to transmit alerts to the relevant security services and competent authorities;

- Intervention and response measures approved by the relevant security services;
- All other necessary measures to improve the security system.

Art. 23. Operators shall be required to put in place specific procedures for visitor access. These procedures shall be approved by the Atomic Energy Commission.

CHAPTER 5

PROTECTION OF INFORMATION

Art. 24. Operators shall, together with the relevant departments of the Atomic Energy Commission, set up a system for the management of sensitive information. To that end, they shall take all necessary measures to protect specific or detailed information whose disclosure could compromise the physical protection of nuclear facilities, nuclear material and the security of radioactive sources.

These measures shall also apply to the requirements regarding the confidentiality of physical protection systems and associated documentation. Access to sensitive information shall be reserved exclusively for individuals authorized by the operator.

Art. 25. The information management system shall enable regulated and codified communication and transmission while preserving the availability, integrity and confidentiality of sensitive information on the physical protection system and related data.

Art. 26. Information systems involved in the continuous surveillance and protection of a facility's various areas shall be used exclusively for this purpose and shall not be connected to public or other networks, except where authorized by the Atomic Energy Commission.

CHAPTER 6

PHYSICAL PROTECTION OF NUCLEAR FACILITIES

Art. 27. Operators shall set up a safety perimeter around their facility. The safety perimeter shall take into consideration the relevant guidelines on the physical protection system.

Art. 28. Operators shall demarcate and regulate access to the following areas within their facility, as defined in article 2 of the present decree:

- Controlled area;
- Protected area;
- Internal area;
- Vital area.

Art. 29. Operators shall notify the Atomic Energy Commission of any changes made to the physical protection of nuclear facilities.

CHAPTER 7

PHYSICAL PROTECTION OF NUCLEAR MATERIAL

Art. 30. The purpose of physical protection measures is to ensure the protection of nuclear material against malicious acts that may lead to dangerous radiological consequences for people, property and the environment.

Art. 31. The nuclear material defined in annex I of the present decree shall not be used or stored other than in the protected area, as defined in article 2 of the present decree.

Access to the protected area shall be subject to the operator's authorization.

Art. 32. Operators shall keep a numbered, signed log of all individuals who access places where nuclear material is contained or stored.

Art. 33. Any modification of the physical protection system shall be approved by the Atomic Energy Commission, subject to consultation with the relevant security services.

Art. 34. The provisions governing the physical protection of nuclear material while in transport, use or storage shall be clarified, where necessary, through an interministerial order of the Minister of National Defence, the Minister of the Interior and Local Authorities, the Minister of Energy and the Minister of Transport.

CHAPTER 8

SECURITY OF RADIOACTIVE SOURCES

Art. 35. Operators shall be responsible for ensuring the security of radioactive sources while in use, storage and transport. Operators of facilities using radioactive sources shall appoint a person responsible for the security and monitoring of those radioactive sources. In particular, they shall keep and update a numbered, signed log of the movements of those sources.

Art. 36. All operators shall develop a security plan for radioactive sources that is adapted to the security level or group through a risk analysis and categorization of the radioactive sources conducted on the basis of thresholds that may give rise to sufficient exposure as to cause harmful effects.

Art. 37. The security levels and conditions applicable to fixed radioactive sources and portable sources, such as gammagraphy devices and industrial measuring probes, that require specific measures shall be clarified, where necessary, by the Atomic Energy Commission through codes of conduct.

Art. 38. The security measures and conditions applicable to radioactive sources while in transport, use and storage shall be clarified, where necessary, through an interministerial order of the Minister of National Defence, the Minister of the Interior and Local Authorities, the Minister of Energy and the Minister of Transport.

CHAPTER 9

NUCLEAR SECURITY COMMITTEE

Art. 39. A Nuclear Security Committee shall be established under the Ministry of Energy.

Art. 40. The Nuclear Security Committee shall be chaired by the Minister of Energy or by the Atomic Energy Commissioner, as the Minister's representative.

The composition of the Nuclear Security Committee shall be defined in a regulation.

Art. 41. The Nuclear Security Committee shall be responsible for developing and updating the intersectoral nuclear security programme. To that end, it must, inter alia:

- Define, assess and update the design basis threat and the nuclear security risk;
- Propose security measures to be put in place by operators of nuclear facilities and material, handlers of equipment containing radioactive sources and any individual or legal person involved in the storage, use or transport of nuclear material and radioactive sources.

The organization and functioning of the Nuclear Security Committee shall be established in its rules of procedure.

CHAPTER 10

SUPERVISION

Art. 42. The Atomic Energy Commission shall be responsible for enforcing the present decree.

Art. 43. Failure to comply with the provisions of the present decree may lead to the revocation of operating licences, without prejudice to the administrative and criminal penalties under the legislation in force.

Art. 44. All nuclear and radioactive material and associated equipment that is seized or confiscated in accordance with the legislation in force shall be placed under the control of the Atomic Energy Commission.

CHAPTER 11

TRANSITIONAL AND FINAL PROVISIONS

Art. 45. All active operators shall, within 12 months of the publication of the present decree in the Official Gazette, take all measures to protect their facilities and the security of radioactive sources for which they are responsible, in compliance with the requirements laid down in the present decree.

Art. 46. The present decree shall be published in the Official Gazette of the People's Democratic Republic of Algeria.

Signed in Algiers on 8 Ramadhan 1435 (6 July A.D. 2014)

Abdelaziz BOUTEFLIKA.

ANNEX 1

CATEGORIZATION OF NUCLEAR MATERIAL

	MATERIAL
	1. Plutonium a
	2. Uranium-235
	3. Uranium-233
	4. Spent nuclear fuel
	FORM
	Unirradiated b
	Unirradiated b - Uranium enriched to 20% 235U or more - Uranium enriched to 10% 235U but less than 20% - Uranium enriched above natural but less than 10% 235U
	Unirradiated b
	CATEGORY I
	2 kg or more
	5 kg or more
	2 kg or more
	CATEGORY II
	less than 2 kg but more than 500 g
	less than 5 kg but more than 1 kg 10 kg or more
	less than 2 kg but more than 500 g
	Depleted or natural uranium, thorium or low-enriched fuel (less than 10% fissile content) d
	CATEGORY III
	500 g or less but more than 15 g
	1 kg or less but more than 15 g less than 10 kg but more than 1 kg 10 kg or more
	500 g or less but more than 15 g

- (a) All plutonium except that with isotopic concentration exceeding 80% in plutonium-238.
- (b) Material not irradiated in a reactor or material irradiated in a reactor but with a radiation level equal to or less than 100 rads/hour at one metre unshielded.
- (c) Quantities not falling in Category III and natural uranium, depleted uranium and thorium should be protected, at a minimum, in accordance with prudent management practice.
- (d) Other fuel which, by virtue of its original fissile material content, is classified as Category I and II before irradiation may be reduced one category level while the radiation level from the fuel exceeds 100 rads/hour at one metre unshielded.

ANNEX II

CATEGORIZATION OF RADIOACTIVE MATERIAL

Radionuclides are based on D values, which define a source as dangerous when, if not under control, sufficient exposure to it could cause severe deterministic effects. The user guide produced by the Atomic Energy Commission contains a complete list of radionuclides and the associated level of activity for each category.

	RADIOACTIVE SOURCE
	Americium-241 (Am-241)
	Americium-241/ beryllium (Am-241/Be)
	Californium-252 (Cf-252)
	Caesium-137 (Cs-137)
	Cobalt-60 (Co-60)
	Curium-244 (Cm-244)
	Gadolinium-153 (Gd-153)
	Iridium-192 (Ir-192)
	Plutonium-238 (Pu-238)
	Plutonium-239/ beryllium (Pu-239/Be)
	Promethium-147 (Pm-147)
	Radium-226 (Ra-226)
	Selenium-75 (Se-75)
	Strontium-90 (Sr-90) /(yttrium-90 (Y-90))
	Thulium-170
	Ytterbium-169
	CATEGORY I SOURCES
	Terabecquerel (TBq)
	Curie (Ci)
	CATEGORY II SOURCES
	Terabecquerel (TBq)
	Curie (Ci)
	CATEGORY III SOURCES
	Terabecquerel (TBq)
	Curie (Ci)

Categorization method

To determine the category of one or several sources, the sum of the activity of all the sources kept in close proximity in a storage or use facility is compared to thresholds of the various categories.