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**National Commission for Nuclear Activities Control  
ROMANIA**

**Overview of the Regulatory Framework for the  
Safety of Nuclear Power Plants in Romania**

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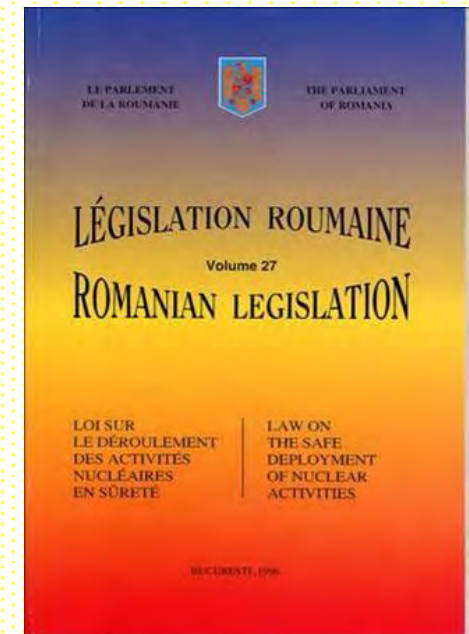
**CNCAN**



**The main Romanian Laws governing the nuclear facilities and activities are:**

- **Law no. 111/1996 on the Safe Deployment, Regulation, Licensing and Control of Nuclear Activities, republished, with subsequent modifications and completions**
- **Law no. 703/2001 on the Civil Liability for Nuclear Damage, published in Official Gazette, no. 818/19.12.2001**

**Romania has an adequate legal infrastructure to fulfil its commitments to all relevant international nuclear safety conventions and obligations**



CNCAN is the national authority responsible for the regulation, licensing and control in the nuclear field, for all the activities and installations under the scope of the Law.

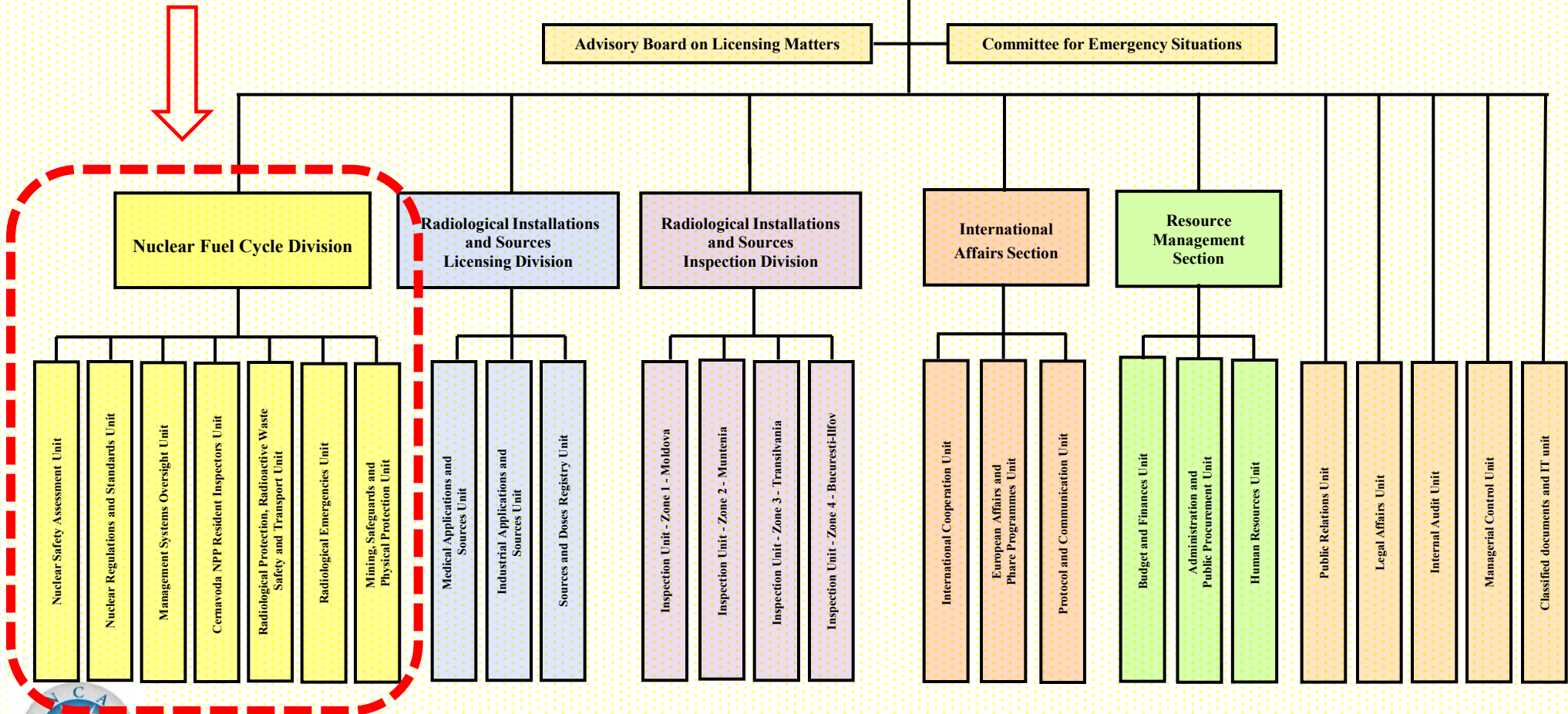
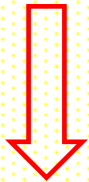
CNCAN has all the necessary legal powers to issue mandatory regulations, to issue licenses for nuclear facilities and activities and to perform evaluations, inspections and enforcement.

CNCAN is a public institution of national interest, with legal personality, having its headquarters in Bucharest, chaired by a President with the rank of State Secretary, coordinated by the Prime Minister through the General Secretariat of the Government.

Starting with the 30<sup>th</sup> of July 2014, Romania has a National Strategy for Nuclear Safety and Security, officially approved by the Romanian Government and by the Supreme Council of National Defence. CNCAN has coordinated the development of the strategy and has the task to monitor its implementation.



The **Nuclear Fuel Cycle Division** is in charge of the regulation, licensing and control of the nuclear installations, nuclear materials and related activities



**The Law no. 111/1996 empowers CNCAN to issue mandatory regulations on:**

- **Nuclear safety;**
- **Radiological protection;**
- **Quality assurance;**
- **Nuclear safeguards / Non-proliferation of nuclear weapons;**
- **Physical protection of nuclear facilities and materials;**
- **Transport of nuclear and other radioactive materials;**
- **Management of radioactive waste and spent nuclear fuel;**
- **Emergency preparedness and intervention in case of nuclear accident;**
- **Manufacturing of products and supply of services for nuclear installations,**
- **Any other regulations necessary for the licensing and control of nuclear facilities and activities.**



**CNCAN has the responsibility to ensure, through the regulations issued and the dispositions arising from the licensing and control (evaluation, inspection and enforcement) procedures, that an adequate framework is in place for the deployment of activities under the scope of the Law.**

All the regulations are developed in observance of the relevant international standards and good practices. The references for the nuclear safety regulations developed by CNCAN include IAEA Safety Standards, WENRA Safety Reference Levels for nuclear power reactors, regulatory requirements developed in other countries (e.g. Canada, USA, UK).

The regulatory process is transparent and predictable.

The regulations in draft are published on the CNCAN website (<http://www.cncan.ro/informatii-de-interes-public/proiecte-de-acte-legislative/>) and are sent for external consultation to interested organisations (e.g. licensees and license applicants) in order to receive feedback. The comments and suggestions received are analysed and discussed in common meetings.

In accordance with the provisions of the Law, CNCAN has the responsibility for reviewing the regulations whenever it is necessary for these to be consistent with international standards and with relevant international legislation in the domain, and for establishing the measures for the application thereof.

The current **nuclear safety regulations** applicable to nuclear power plants include the following:

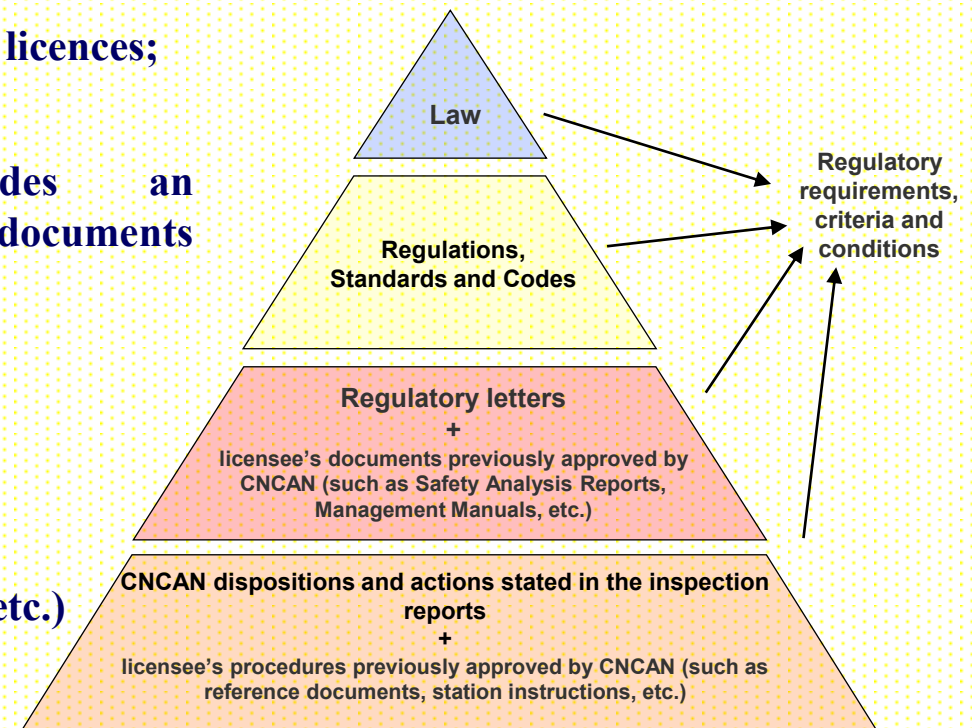
- ❖ **NSN-01** - Nuclear safety requirements on siting of nuclear power plants (NPPs) (2010)
- ❖ **NSN-02** - Nuclear safety requirements on the design and construction of NPPs (2010)
- ❖ **NSN-06** – Nuclear Safety Requirements for the protection of nuclear installations against external events of natural origin (2015)
- ❖ **NSN-07** – Nuclear Safety Requirements on the response to transients, accident management and on-site emergency preparedness and response for NPPs (2014)
- ❖ **NSN-08** – Nuclear safety requirements on Probabilistic Safety Assessment for NPPs (2006).
- ❖ **NSN-09** - Nuclear safety requirements on Fire Protection in NPPs (2006);
- ❖ **NSN-10** - Nuclear safety requirements on Periodic Safety Review for NPPs (2006);
- ❖ **NSN-11** - Nuclear safety requirements on Emergency Core Cooling Systems for CANDU NPPs (2006);
- ❖ **NSN-12** - Nuclear safety requirements on Containment Systems for CANDU NPPs (2005);
- ❖ **NSN-13** - Nuclear safety requirements on Shutdown Systems for CANDU NPPs (2005);
- ❖ **NSN-14** (rev.1) – Regulation on the licensing of operating personnel, management personnel and personnel in charge of specific training, applicable to nuclear power plants, research reactors and other nuclear installations.

The above mentioned regulations are available in Romanian on CNCAN's website

<http://www.cncan.ro/legislatie/norme/norme-si-ghiduri-de-securitate-nucleara/>

The current licensing practice is based on the provisions of the Law no. 111/1996 and of the regulations issued by CNCAN. The detailed regulatory requirements, as well as the assessment and inspection criteria used by CNCAN in the licensing / authorization process are derived from a number of sources, such as:

- ❖ Romanian regulations;
- ❖ Limits and Conditions specified in the different licences;
- ❖ IAEA Safety Standards and Guides;
- ❖ Other international standards, guides and recommendations, including regulatory documents developed in other jurisdictions;
- ❖ Applicable Standards and Codes;
- ❖ Licensing basis documentation produced by the licensee and approved or accepted by CNCAN (e.g. Safety Analysis Reports, Design Manuals, reference documents, station instructions, operating manuals, technical basis documents, etc.)





The licences for nuclear installations are granted to legal persons, at their request, if they prove compliance with the provisions of the Law and specific regulations issued by CNCAN.

The licenses are applied for and issued, respectively, either simultaneously or successively, separately for each kind of activity or for each nuclear or radiological installation operating independently, in the property of the applicant.

Stages of the licensing process for a nuclear installation, as stated in the Law:

- ❖ design;
- ❖ siting;
- ❖ construction;
- ❖ commissioning;
- ❖ trial operation;
- ❖ operation;
- ❖ repair and/or maintenance (as major refurbishment);
- ❖ modification (as major upgrades);
- ❖ preservation;
- ❖ decommissioning.



- ❖ **In accordance with the provisions of the Law, CNCAN is empowered to request from the licensees, or from the applicants for a licence, all the documentation needed for the regulatory decision making process on safety related matters.**
- ❖ **The documentation that needs to be submitted to CNCAN for review and approval is usually specified in the regulations and licence conditions.**
- ❖ **Additional support documentation is requested on a case by case basis, as specified in regulatory letters, minutes of meetings between CNCAN staff and licensee's representatives, inspection reports, etc.**
- ❖ **In addition to the review of the documentation, CNCAN verifies the claims made by the applicant / licensee through audits, inspections, licensing meetings, a system of Witness Points and Hold Points.**

- ❖ According to the Law, the licensees and applicants have the obligation of facilitating CNCAN inspections and providing access to documentation and any other information requested by CNCAN. The general roles, authority and responsibilities of CNCAN inspectors are set in the Law.
- ❖ The key objective of the CNCAN inspection programme is to monitor compliance with the legal, regulatory and licensing requirements, and to take enforcement action in the event of non-compliance.
- ❖ The inspections performed by CNCAN include:
  - ❖ scheduled inspections, planned and performed either by each of the technical divisions, or jointly (e.g. on the occasion of major licensing milestones)
  - ❖ unscheduled and/or unannounced inspections, some of which are reactive inspections in response to incidents; and
  - ❖ routines and daily observations performed by the resident inspectors.
- ❖ The assessment and inspection activities performed by CNCAN staff are documented by one of the following means: assessment reports; inspection reports; written minutes of the meetings with licensees' or applicant's representatives.
- ❖ The actions that CNCAN can take in case of non-compliance cover all the range from verbal warnings and written dispositions to heavy fines and suspension or revocation off the license.

- ❖ **The Romanian regulatory framework for nuclear safety is in line with the relevant international standards; it represents a combination of prescriptive and goal-setting approaches.**
- ❖ **The regulatory practices for issuing regulations and for licensing, safety review and assessment, inspection and enforcement are similar to those in other countries with significant experience in operating nuclear power plants.**
- ❖ **The evolution of the regulatory framework is predictable, being influenced mainly by the changes in relevant legal instruments at EU level, WENRA Reference Levels and IAEA Safety Standards.**
- ❖ **The changes / updates to the regulations are performed in a transparent manner and are subject to a formal process for the information and consultation of the public and of the stakeholders.**
- ❖ **The regulatory system in Romania supports the continuous improvement of the safety of the nuclear installations, while explicitly assigning the prime responsibility for nuclear safety to the license holder.**