



National Commission for Nuclear Activities Control (CNCAN)

Regulatory Approach for the Deployment of SMRs in Romania

National Commission for Nuclear Activities Control (CNCAN)

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Content of the presentation

- 1. About our institution CNCAN**
- 2. Legal and Regulatory Framework**
- 3. Overview of the licensing process for SMRs**
- 4. International/National cooperation, training and exchange of information**
- 5. Conclusions**

About CNCAN

- ✓ The National Commission for Nuclear Activities Control (CNCAN) is the national competent authority responsible for the regulation, licensing and control in the nuclear field, for all the nuclear activities and installations in Romania.
- ✓ CNCAN has all the necessary legal powers to issue mandatory regulations, to issue licenses for nuclear facilities and activities and to perform safety evaluations, inspections and enforcement.
- ✓ CNCAN has the responsibility to ensure, through the regulations issued, the licensing process and the dispositions arising from the control procedures (review and assessment, inspection and enforcement), that an adequate framework is in place for the safe deployment of nuclear activities.



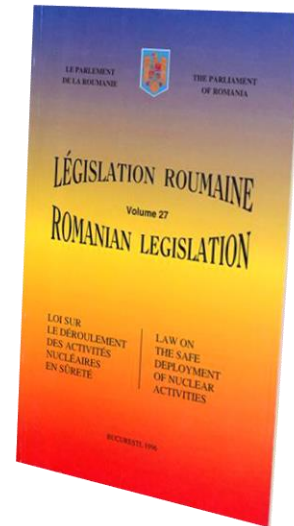
About CNCAN

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

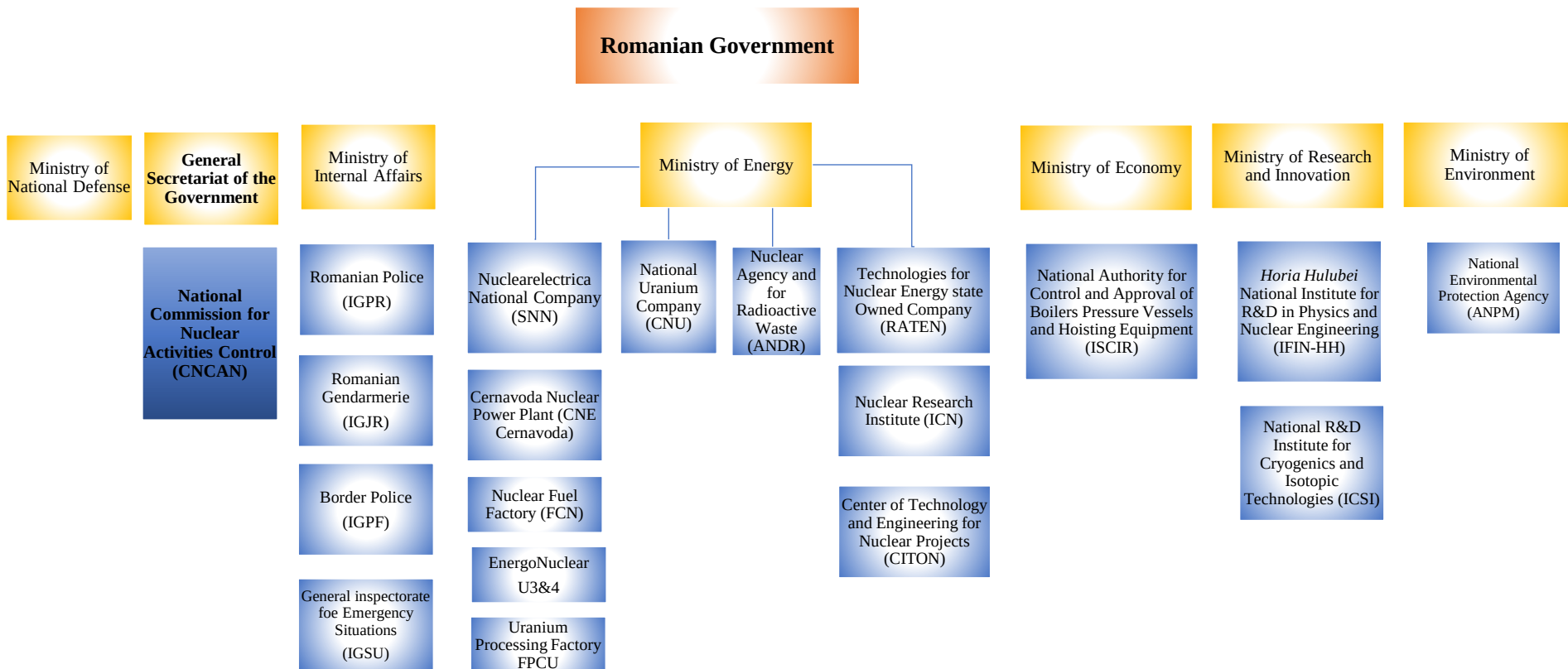
- ✓ **Law no. 111/1996 on the Safe Deployment, Regulation, Licensing and Control of Nuclear Activities, republished, with subsequent modifications and completions** *(last supplemented and updated in 2023)*
- ✓ **Law no. 703/2001 on the Civil Liability for Nuclear Damage, published in Official Gazette, no. 818/19.12.2001**
- ✓ **National Strategy on Nuclear Safety and Security, approved by Government Decision no. 600/2014** *(under revision)*

In addition, we need to follow international rules and regulations, such as international conventions and treaties in nuclear field, the Euratom Treaty and the EU regulations and directives applicable to nuclear activities. All these provisions have been transposed in the national legislation.

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



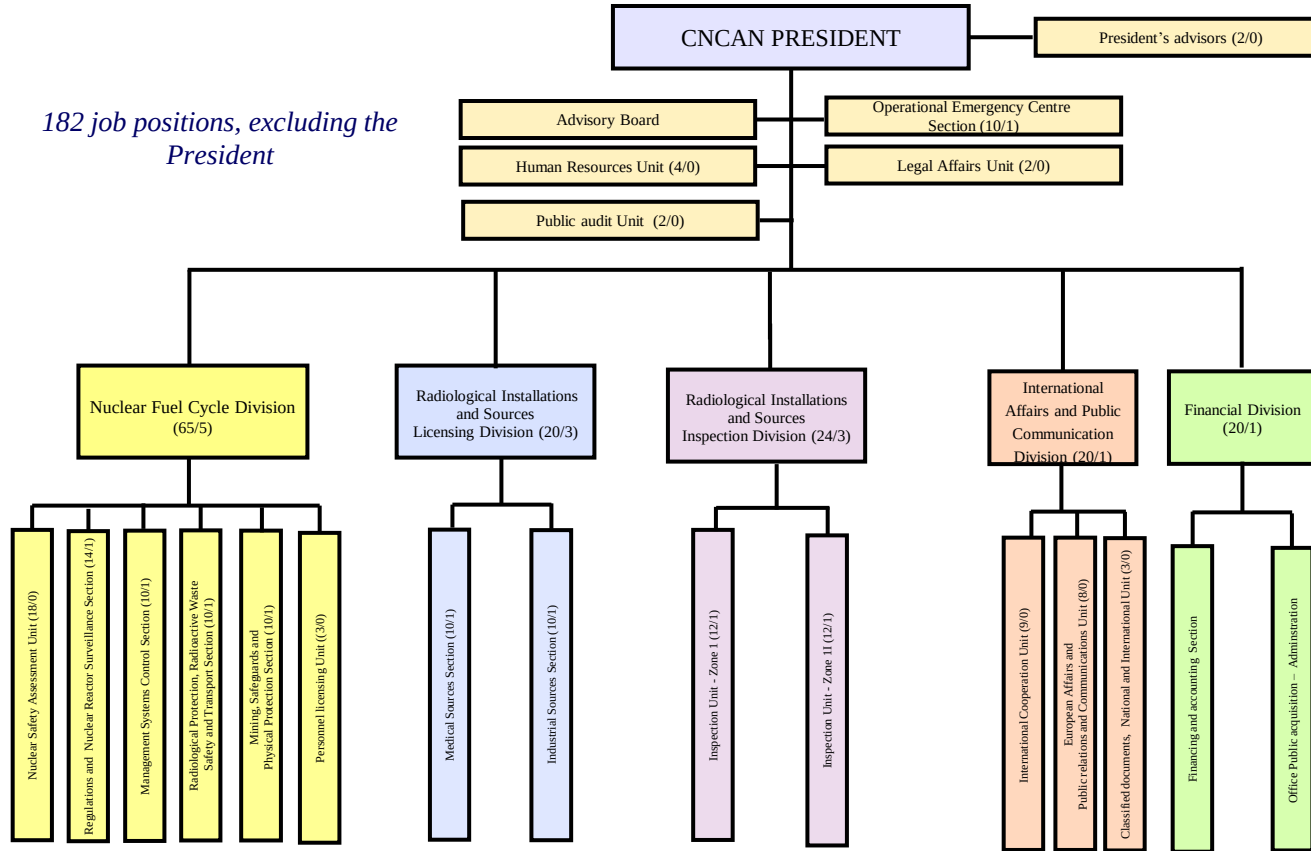
About CNCAN



Regional Workshop on Safety Benefits and Challenges in the Development of the Adoption of Small Modular Reactors

31 March - 4 April 2025

About CNCAN



✓ CNCAN is under the subordination of the Government and in the coordination of the Prime Minister, through the General Secretariat of the Government

About CNCAN

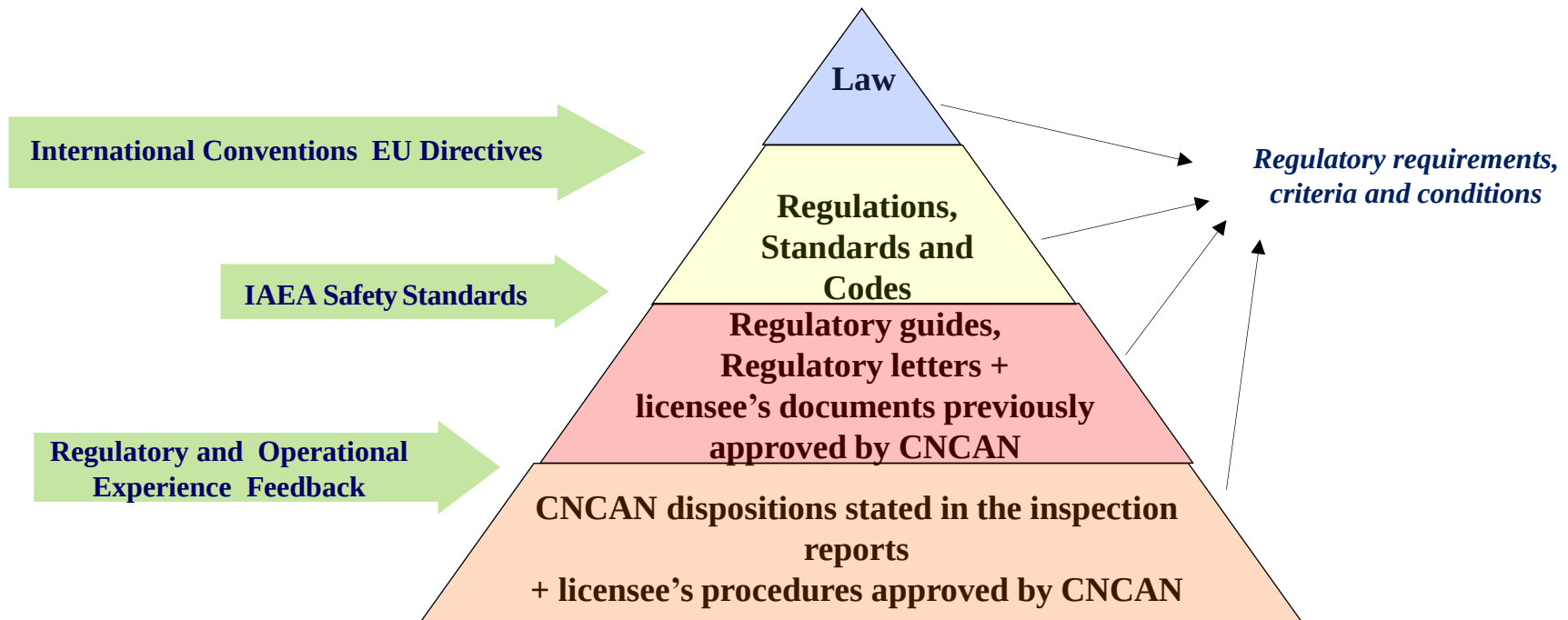
Main responsibilities

The Law no. 111/1996 empowers CNCAN to provide a regulatory framework and enforce the regulations by issuing licenses and perform regulatory oversight on :

- ✓ Nuclear safety;
- ✓ Radiological protection;
- ✓ Quality management systems;
- ✓ 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 response in case of nuclear or radiological accident;
- ✓ Manufacturing of products and supply of services for nuclear and radiological installations.

Legal and Regulatory Framework

The updating and modernization of the legal and regulatory framework takes into account the development of the international legislation, the current standards, the regulatory and industry feedback, the results of research and development.



Regulatory documents containing requirements used by CNCAN in the licensing process

Legal and Regulatory Framework

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

- ✓ NSN-01 - Nuclear safety requirements on siting of nuclear power plants (NPPs) (2010);
- ✓ NSN-02 (*under revision*) - Nuclear safety requirements on the design and construction of NPPs (2010);
- ✓ NSN-05 (rev.1) – Nuclear safety requirements on the operational limits and conditions for nuclear installations (2023);
- ✓ NSN-06 – Nuclear safety requirements for the protection of nuclear installations against external events of natural origin (2015);
- ✓ NSN-07 (rev.1) – Nuclear safety requirements on the response to transients, accident management and on-site emergency preparedness and response for NPPs (2024);
- ✓ 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 (2010);
- ✓ 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 (2024);

Legal and Regulatory Framework

The current **nuclear safety regulations** applicable to nuclear installations include:

- ✓ NSN-15 – Regulation on the elaboration, documentation, and independent verification of analyses, calculations, and technical evaluations important to nuclear safety (2024);
- ✓ NSN-16 (rev. 1) – Regulation on the surveillance, maintenance, testing and in-service inspections for nuclear installations (2020);
- ✓ NSN-17 (rev. 1) - Nuclear safety requirements on ageing management for nuclear installations (2021);
- ✓ NSN-18 (rev. 1) – Regulation on the recording, reporting, analysis of events and on the use of operational experience for nuclear installations (2022);
- ✓ NSN-20 (rev. 1) – Regulation on the nuclear safety policy and independent nuclear safety oversight for nuclear installations (2022);
- ✓ NSN-21 (rev. 1) – Fundamental Nuclear Safety Regulations for Nuclear Installations (2020);
- ✓ **NSN-22 (rev. 1) – Regulation on the licensing of the nuclear installations (2023);**
- ✓ NSN-23 (rev. 1) – Nuclear safety regulation on the selection, training, qualification and authorization of the personnel of organizations responsible for the design, siting, construction, commissioning, operation and decommissioning of nuclear installations (2024);
- ✓ NSN-24 – Regulation on the deterministic nuclear safety analyses for nuclear installations (2019);
- ✓ NSN-25 – Requirements on the decisional transparency in licensing process for nuclear installations (2019);
- ✓ NSN-26 – Regulation on interfaces between nuclear safety, radiological safety, physical protection, protection against cyber threats, and the control of nuclear safeguards (2019);
- ✓ **NSN-27 (rev.1) – Regulation on utilizing standards for ensuring, maintaining, evaluating and continuously improving nuclear safety for nuclear power plants (2021);**
- ✓ NSN-30 - Specific conditions regarding the awarding of certain public procurement contracts and sectoral contracts for products, services and/or works intended for systems that ensure the functions of nuclear safety, radiological safety, physical protection, protection against cyber threats and the reliable operation of nuclear installations (2022);
- ✓ NSN-31 – Regulations on the use of artificial intelligence in applications intended for nuclear installations (2024);
- ✓ NSC-01 (rev.1) – Regulation on the protection of nuclear installations against cyber threats (2021).

Regional Workshop on Safety Benefits and Challenges in the Development of the Adoption of Small Modular Reactors

Legal and Regulatory Framework

In addition to mandatory regulations, CNCAN also issues regulatory guides. The current regulatory guides are provided below:

- ✓ GSN-01 – Guide on the industrial codes and standards for nuclear power plants (2015);
- ✓ GSN-02 – Guide on the independent verification of nuclear safety analyses and evaluations (2015);
- ✓ GSN-03 - Guide on fulfilling the overall nuclear safety objective set in the fundamental nuclear safety requirements for nuclear installations (2018);
- ✓ GSN-04 – Guide on the format and content of the Final Safety Analysis Report for nuclear power plants (2015); GSN-05 and GSN-06, issued in 2017, address the FSAR for research reactors and nuclear fuel fabrication plants;
- ✓ GSN-07 – Nuclear safety guide for the preparation of nuclear installations refurbishment (2019);
- ✓ GSN-08 - Nuclear Safety Guide on restarting nuclear facilities after unplanned shutdowns (2019);
- ✓ GSN-09 – Guide on the development and assessment of nuclear safety culture (2019);
- ✓ GSN-10 – Nuclear Safety Guide on the time limited ageing analyses (2020).

We are also considering the formal endorsement of regulatory guides issued by US NRC, as our technical regulations are generally compatible with the requirements issued by the US NRC.

In addition, we have regulations applicable to nuclear installation on radiological protection, management systems, emergency preparedness and response, safeguards, physical protection, radioactive waste management.

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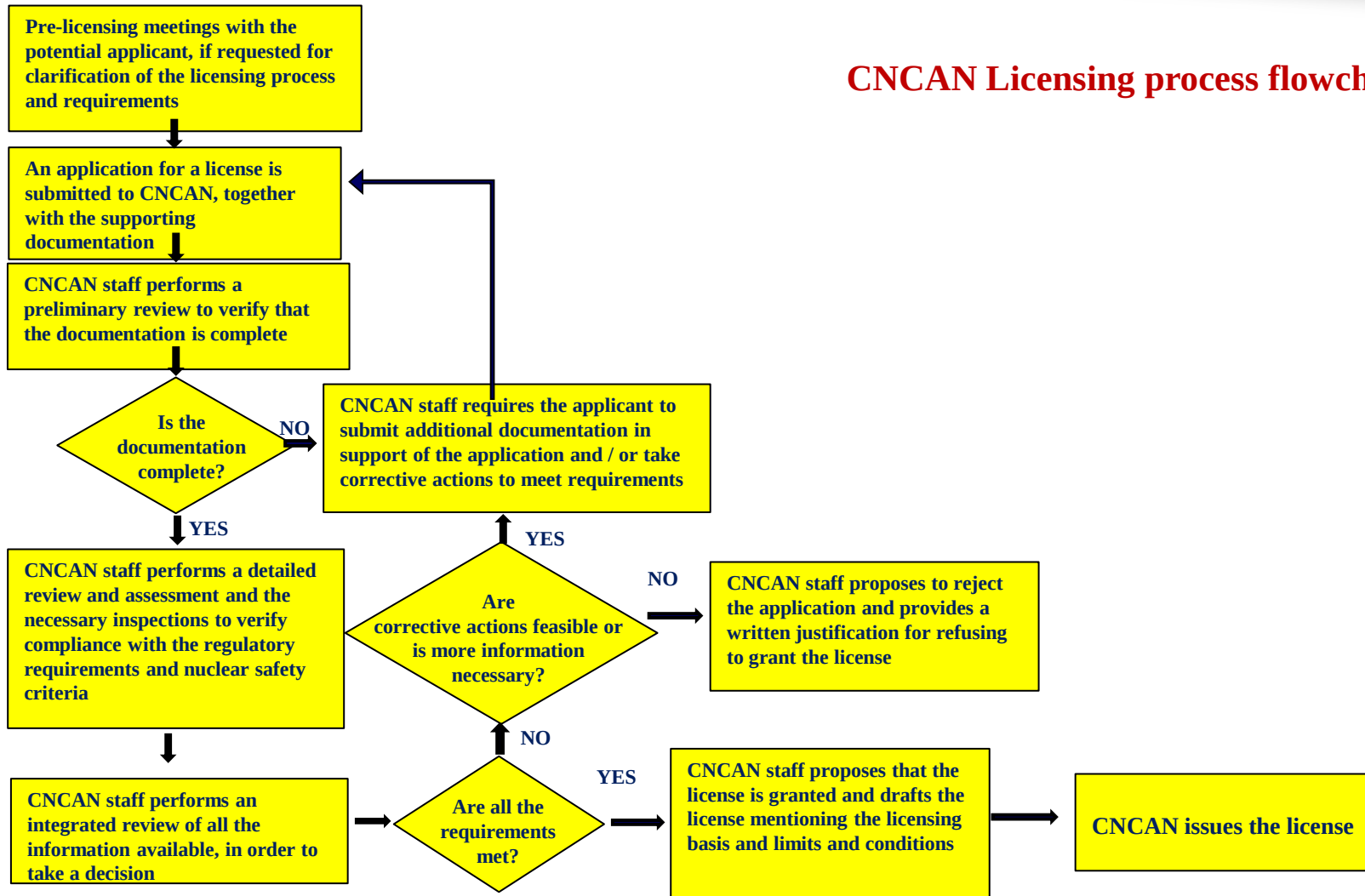
Overview of the licensing process

The general process followed upon receipt of an application for a licence includes:

- specification and / or clarification of the applicable regulatory requirements (if these are not already known to the applicant);
- review and assessment of documentation submitted to CNCAN;
- request for additional information, when necessary;
- performance of regulatory inspections to verify compliance with the legal and regulatory requirements (including the issuance of regulatory dispositions, as appropriate);
- integrated review of data from the safety documentation submitted by the applicant and of the findings of the regulatory inspections (including of the implementation of any corrective actions required);
- documentation of the basis for issuing the licence (or for refusing to grant a licence, if that is the case);
- issuance of the licence, stating the licensing basis and the limits and conditions to be observed by the licensee.

Overview of the licensing process

CNCAN Licensing process flowchart



Overview of the licensing process

Timetable for Submission of Authorization Requests and CNCAN Evaluation Duration

Type of Authorization Phase	Recommended Submission Lead Time
First-time authorization for new installation	≥ 12 months before needed
Other phases (siting, construction, ...)	≥ 18 months before activity

CNCAN Evaluation Process Duration

There is **no fixed statutory deadline** for CNCAN to issue an authorization. Instead, the regulations allows CNCAN to determine the evaluation duration **case-by-case**, depending on:

- The **complexity** of the documentation,
- The **type of modification or authorization phase**,
- The **quality and completeness** of the documentation submitted,
- The need for **clarifications, supplementary info, or inspections**.

Overview of the licensing process

The detailed regulatory requirements, as well as the assessment and inspection criteria used by CNCAN in the licensing process are derived from a **number of sources**, such as:

- **Romanian regulations;**
- **Limits and Conditions specified in the different licenses;**
- **Regulatory guides;**
- **IAEA Safety Standards and Guides;**
- **ICRP recommendations;**
- **Applicable Standards and Codes (CSA, ANSI, ASME, IEEE, etc.);**
- **Safety related documentation produced by the licensee and approved or accepted by CNCAN (e.g. Safety Analysis Reports, Safety Design Guides, Design Manuals, reference documents, station instructions, operating manuals, technical basis documents).**

Apart from the formally issued (published) regulations, the requirements established by CNCAN in the licensing process are imposed through regulatory letters. Requirements and dispositions are stated also in the inspection reports. In order to facilitate the implementation of the requirements established in the regulations, CNCAN issues regulatory guides on various topics.

Overview of the licensing process

The licensing process for **Small Modular Reactors (SMRs)** in Romania follows a structured approach as outlined in CNCAN regulation *NSN-22 (rev.1) - Regulation on the licensing of the nuclear installations*, ensuring that each phase complies with nuclear safety and security requirements set by CNCAN.

Design Authorization

Initial approval of design plans and safety measures.

Siting Authorization

Evaluation and approval of the proposed location.

Construction and Assembly Authorization

Permission to begin and complete physical construction.

Commissioning Authorization

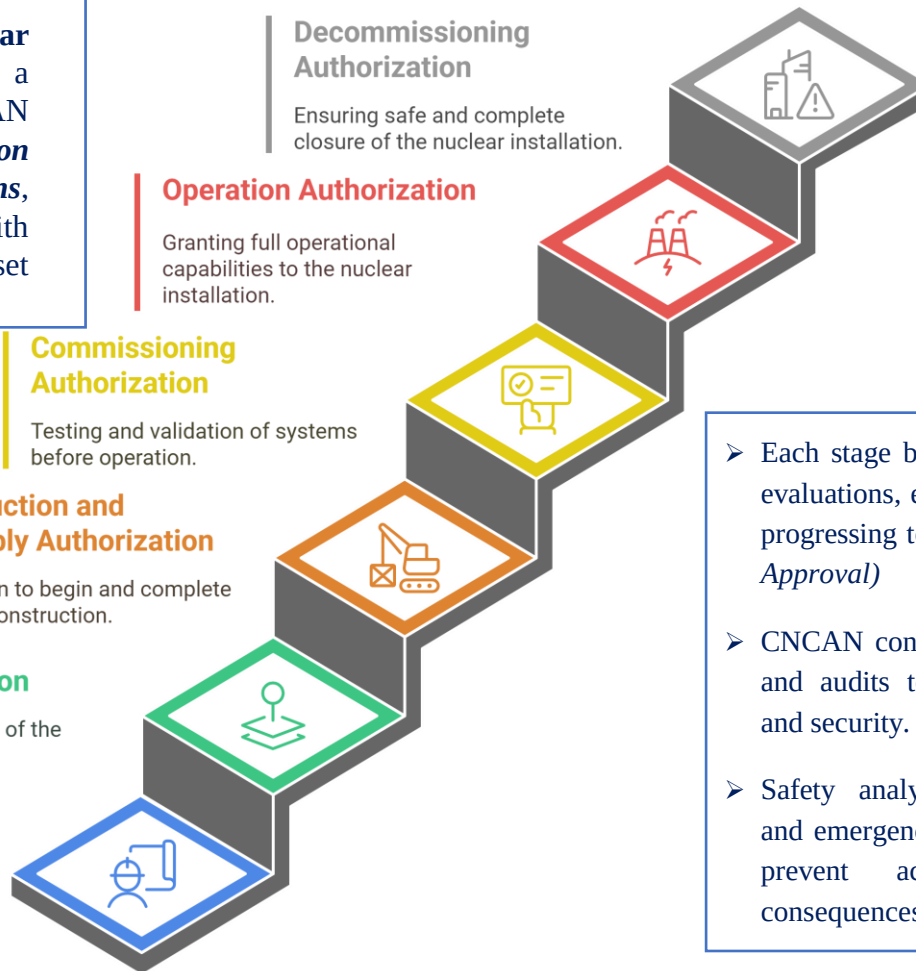
Testing and validation of systems before operation.

Operation Authorization

Granting full operational capabilities to the nuclear installation.

Decommissioning Authorization

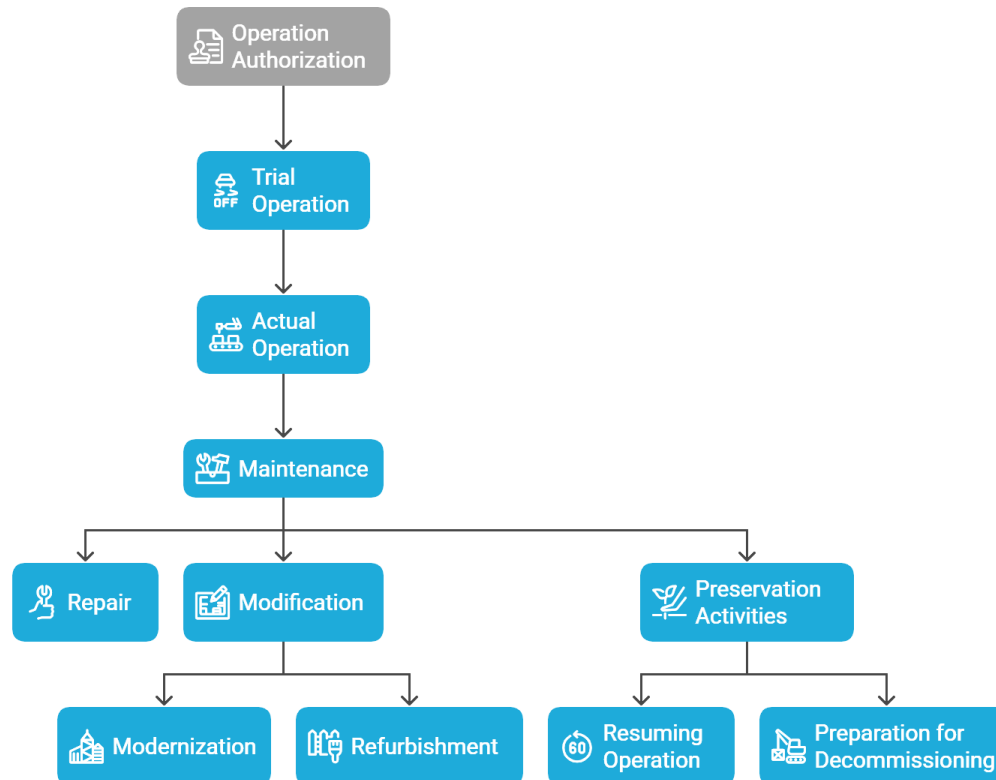
Ensuring safe and complete closure of the nuclear installation.



- Each stage builds upon previous safety evaluations, ensuring compliance before progressing to the next phase. (*Stepwise Approval*)
- CNCAN conducts reviews, inspections, and audits to maintain nuclear safety and security. (*Regulatory Oversight*)
- Safety analyses, hazard assessments, and emergency preparedness plans help prevent accidents and mitigate consequences. (*Risk Mitigation*)

Overview of the licensing process

The following activities are considered components of the operational phase of the nuclear installation and are authorized under the operating authorization for the nuclear installation:



Overview of the licensing process

The **validity periods** of the different types of authorizations issued by **CNCAN** for nuclear installations are clearly defined in our regulations.

Authorization Type	Validity Period
Design Authorization	10 years
Siting Authorization	10 years (renewable if construction not yet authorized)
Construction & Assembly Authorization	10 years (renewable if commissioning not yet authorized)
Commissioning Authorization	5 years (renewable if operation not yet authorized)
Operating Authorization	Custom-defined based on estimated lifetime provided by applicant; no fixed period, but subject to 10-year periodic safety reviews and updates
Decommissioning Authorization	Not fixed – Valid for the duration of the decommissioning activity, Can be issued in stages, aligned with the Final Decommissioning Plan

"The authorizations issued by CNCAN are valid for the periods specified in the authorizations, subject to compliance with the limits and conditions stated and the requirements set in the specific regulations issued by CNCAN."

Overview of the licensing process

Specific requirements stated in *NSN-22 (rev.1) - Regulation on the licensing of the nuclear installations*, for nuclear power plants, including those equipped with modular reactors.

!!! For a nuclear installation composed of **multiple modules** with independent functionality and identical design, the authorizations are issued for the **total number of modules** as defined in the overall design of the nuclear installation. In such cases, the licensee shall notify CNCAN of the implementation schedule for the entire installation as well as for each individual module, for the purpose of establishing the inspection program and identifying specific activities that require endorsements and approvals in accordance with the applicable regulations.

!!! For a nuclear installation composed of **multiple modules** with independent functionality and identical design, the **Safety Analysis Report (SAR)** shall be developed in such a manner as to provide all necessary information regarding the design and operation of an individual module, as well as the design and operation of the installation as a whole, including potential interactions between modules, for the total number of modules as defined in the overall design of the respective nuclear installation.

!!! The application for authorization for the nuclear installation, for each phase, shall be accompanied by the following documents:

....

- **for nuclear power plants, including those equipped with modular reactors, as well as for demonstration reactors**, a report, together with the related supporting documents, demonstrating the effective fulfillment of the applicable requirements of the document establishing the nuclear safety reference levels for existing reactors, issued by the Western European Nuclear Regulators Association, in its latest edition in force;

....

Overview of the licensing process

As part of the authorization process, CNCAN may use assessments and inspections performed by the nuclear regulatory authorities of countries in which nuclear installations with similar designs have been authorized, under the following conditions



Cooperation Agreement & Access to information

A formal technical cooperation agreement is in place;

CNCAN has access to relevant regulatory, licensing, and inspection information in English, including official reports.



Regulatory Compatibility

The foreign regulatory system is compatible with CNCAN's;

Requirements applied are equal to or more stringent than CNCAN's regulations.



Technical Competence

The foreign authority has sufficient technical expertise and qualified personnel in all required areas.



Rigorous Processes Standard-Based Processes

Assessment and inspection processes implemented have a scope, technical rigor, and level of detail consistent with international standards and at least equivalent with those imposed by CNCAN.



Relevance and Applicability

Information from assessment and inspection reports of the foreign regulatory authority is relevant, technically accurate, and applicable in accordance with the provisions of CNCAN regulations and with the accepted standards and codes

Overview of the licensing process –Regulatory review

CNCAN may make use of the regulatory reviews performed in countries that have licensed the same or similar nuclear installations. In such cases, CNCAN would seek assurance that the regulatory framework and review process in the respective countries are stricter or at least as thorough as the regulatory framework and review process in Romania and the **safety goals and objectives and technical criteria are compatible**.

The reviews performed in other countries are an useful input to the regulatory decision-making process of CNCAN, **but cannot replace its own regulatory review**.

For a **design that has been already licensed** (and constructed, commissioned, operated) in the country of origin of the vendor and / or in another country with a robust and transparent regulatory system and nuclear safety infrastructure, even if the scope and depth of CNCAN's regulatory review may be reduced, it would still have **to address design changes to the reference plant, site specific issues, differences in regulatory requirements and criteria, etc.**

We can benefit from the review and licensing work performed by the US NRC, as our regulations are generally compatible and in the last years we have become more accustomed with the regulatory review, inspection and licensing practices, due to continuous support we received from the NRC, including through the IRDP program.

✓For major reviews, performed by CNCAN prior to granting a license/authorization, interdisciplinary teams are established, which include experienced staff from all the technical units involved in licensing activities, with the necessary expertise for covering all the areas of review: nuclear safety, radiation protection, physical protection, quality management. So far, for the basic activities CNCAN could cover the need of qualified personnel, **however more resources are needed** in order to accommodate large volumes of work under the nuclear power programme .

✓In order to have an harmonized approach and to optimize the resources necessary for the regulatory review and assessment and licensing, CNCAN intends to make use of the support provided using the mechanisms developed in ENSREG and IAEA WGs.

Overview of the licensing process –Inspections

- 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.
- Regulatory inspections are performed during all stages of the licensing process.
- Inspections are performed for verifying compliance with the regulatory requirements. They are complementary to the regulatory review and assessment activities and provide input to the licensing process.
- There is a high workload anticipated for inspections during the construction and commissioning phases.
- CNCAN audits and licenses also the suppliers of products and services for nuclear installations.

Public Engagement Integrated into the Regulatory Framework

Public engagement plays a **critical role** in the **licensing process of Small Modular Reactors (SMRs)** in Romania, as mandated by **NSN-25 - Requirements on the decisional transparency in licensing process for nuclear installations**, a national regulation issued by CNCAN. The regulation ensures **transparency, public participation, and informed decision-making** in nuclear licensing.

Access to Information

- Applicants shall publish summaries of safety assessments and provide relevant project details on their websites and to CNCAN.
- CNCAN publishes safety review conclusions and allows public access to non-classified licensing documents, like the summary from the Safety Analysis Report.

Public Consultations and Feedback

- Public debates are held if requested by CNCAN, allowing stakeholders and local communities to express concerns.
- The public can submit suggestions, recommendations, and objections, which are officially recorded and reviewed.

Decision-Making Transparency

- CNCAN organizes public meetings where licensing decisions and safety evaluations are presented and discussed.
- Final decisions and justifications are publicly documented and accessible online on CNCAN website.

The screenshot displays the official website of the National Commission for Nuclear Control (CNCAN) of Romania. The header features the Romanian coat of arms and the text 'Guvernul Romaniei' and 'Comisia Nationala pentru Controlul Activitatilor Nucleare'. A navigation menu on the left lists various topics such as 'Home', 'Proiect Norvegia 2019-2024', 'Proiect Norvegia', 'Pagina principala', 'Despre noi', 'Transparența decizională', 'Proiect de acte normative aflate în discuție publică', 'Raport de activitate conform Legii 52/2003', 'Dezbateri', 'Sedinte publice (Anunturi/Minute)', 'Arhiva', 'Legislatie', 'Noutati si evenimente', 'Informati de interes public', 'Contact', 'Integritatea Institucionala', 'Instalati nucleare controlate', 'Constructii cu specific nuclear', 'Materiale Nucleare', 'Surse de Radiatii Ionizante', 'Inspectie si Supraveghere', 'Surse naturale de radiatii, Radon', 'Dezastre radioactive si decontare', 'Transportul materialelor radioactive', 'Pregatirea, identificarea si interventia in caz de accident nuclear sau urgenta radiologica', 'Platforma Nationala de Pregatire pentru Situatii de Urgenta', 'Managementul calitatii', 'Cooperare internationala', and 'Grupul de lucru pentru evaluarea riscurilor asociate activitatilor nucleare si radiologice'. The main content area is titled 'Minuta Dezbateri Publica 26.02.2024 -CTRF' and 'Raport public de evaluare - CNCAN - autorizare CTRF'. It includes an 'ANUNT' section about a public debate for the CTRF facility, a 'Data si ora de dezbateri' section stating the date as 26 februarie 2024, ora 13:00, and a 'LOCATIE' section specifying the location as Str. Ovidiu nr. 11, Judetul Constanta, Romania. It also contains a 'RECOMANDARI PENTRU PARTICIPANTI' section with instructions for participants and a 'DOCUMENTE IN CONSULTARE' section listing documents available for review.

International/National cooperation, training and exchange of information

In the area of **international cooperation** and exchange of information, CNCAN maintains relations with a number of nuclear regulatory authorities and organizations worldwide, through bilateral arrangements and commitments under international conventions in the nuclear field. In particular, CNCAN maintains frequent communications on regulatory matters with the Canadian Nuclear Safety Commission (CNSC) and US Nuclear Regulatory Commission (NRC).

The international activities in which CNCAN is involved include the participation in the activities/meetings with a focus on SMRs are:

- **WENRA** (Western European Nuclear Regulators Association) and its technical working groups;
- **ENSREG** (European Nuclear Safety Regulators Group) and its working group SMR Task Force,
- **NHSI** (Nuclear Harmonization and Standardization Initiative) group launched by IAEA,

With regard to technical assistance received from international organizations, CNCAN is a beneficiary of **technical cooperation projects managed by the IAEA**, at national and regional level. Through these projects, CNCAN receives expert missions and support in the organization of international and national seminars.

In the are of **national cooperation** and exchange of information, CNCAN is a member of the national Small Modular Reactor (SMR) Working Group. The working group operates under a structured Working Plan that addresses the following key objectives:

- Supporting the participation of U.S. industry in Romania's plans to develop civil nuclear energy options, including the establishment of a regional SMR hub;
- Collaborating to support Romania in the development of nuclear legislation, regulatory frameworks, requirements, and guidance documents, as well as activities related to site characterization, grid code development, and grid integration studies;
- Pursuing joint opportunities for SMR deployment in third-country markets.

International cooperation, training and exchange of information

➤ **US NRC support** in the framework of the upcoming new licensing activities for CNCAN:

- ✓ Several online training done by NRC during 2023-2024 regarding the NRC Licensing of the NuScale Design;
- ✓ A training of 4 weeks visit to NRC headquarters for 3 CNCAN staff
- The training was beneficial in the context of the licensing application received by CNCAN, regarding the design and siting of NuScale VOYGR-6 small modular reactor in Romania which involves technical aspects of SMRs, as well as the steps and milestones of the licensing process for such a design. In particular the training was focused on the review of the safety assessment process for NuScale US460 Standard Design Approval Application performed currently by the US NRC.
- ✓ Other technical visits to NRC headquarter, may take place in 2025 for CNCAN staff if needed for the review of the design licensing documentation.
- ✓ After receiving and reviewing the safety report chapters from RoPower, CNCAN may request support and establish an online meeting schedule where more CNCAN staff could ask NRC staff for advice for the review of the chapters of the SAR.



International cooperation, training and exchange of information

- **International collaboration** between CNCAN and FANC (**Federal Agency for Nuclear Control the nuclear regulatory authority of Belgium**) for pre-licensing review of LFR-SMR technology (e.g., MYRRHA, ALFRED).

The key objectives of this collaboration are:

- Strengthen regulatory expertise on LFR-SMR technologies and support follow-up of related R&D;
- Support the licensability of both LFR-SMR design concepts;
- Foster a common understanding of the technology and associated safety challenges;
- Identify regulatory barriers and differences in high-level requirements or practices that may hinder design convergence
- Promote harmonization of high-level national regulatory requirements and practices, where feasible;
- Contribute actively to international initiatives supporting the safe and efficient development of SMRs.

Time frame: In line with the EU-SMR-LFR consortium planning, it is proposed to perform the international pre-licensing within **2025-2028** period.

➤ *NUMARK Support to CNCAN*

NUMARK will design, develop and deliver training modules in accordance with the industry standard SAT methodology covering the fundamental design, operational and licensing aspects of the *PWR-20 nuclear reactor promoted by last energy USA*, for the following areas:

- Reactor System Design & Operation;
- Plant Safety Analysis – Design Basis Events;
- Supply Chain Verification & Vendor Qualification ;
- The Graded Approach to Regulation.

Time frame: starting 2025

International cooperation, training and exchange of information

➤ *During May – December 2022 a series of virtual workshops reffering to 10 topics were delivered by the FALCON Consortium to CNCAN staff regarding ALFRED Project*

- | | |
|----------------------|--|
| • General | Introduction to LFR Technology |
| • Fuel & Activation | LFR Fuel assembly characteristics and manufacturing |
| • Fuel & Activation | Source term, fission products release and transport |
| • Reactivity Control | Engineered safety features for Reactivity control |
| • Reactivity Control | Introductory description of reactivity coefficients in fast reactors & Main safety transients and correlated feedbacks |
| • Thermal hydraulics | Steam generator tube rupture |
| • Thermal hydraulics | Engineered safety features for passive heat removal& Overcooling transients and coolant freezing |
| • Thermal hydraulics | System thermal hydraulic Code Validation |
| • Coolant chemistry | Dissolution and deposition of impurities: physics and effects |
| • System design | ALFRED Reactor Coolant System design and approach to operation |
| • System design | Seismic analysis and engineered features |

Conclusions

- Regulatory adaptation is essential for SMRs.
- Romania has a mature regulatory framework aligned with international standards, capable of supporting SMR deployment.
- CNCAN applies a stepwise licensing process, with clear regulatory requirements at each stage, ensuring safety and oversight throughout the lifecycle of nuclear installations.
- Specific provisions for modular reactors are in place, addressing integrated licensing for multi-module designs and inter-module safety interactions.
- Transparency and public participation are embedded in the licensing process, strengthening trust and accountability.
- CNCAN actively engages in international cooperation, including NHSI (IAEA), WENRA, ENSREG, and bilateral partnerships (e.g., NRC, FANC).
- Capacity building is ongoing, through international training (e.g., NRC, NUMARK, IAEA, FALCON) and technical assistance, to prepare for future licensing demands.
- CNCAN can leverage foreign regulatory reviews as input, while conducting its own independent evaluations to account for site-specific, design-specific, and regulatory differences.

National Commission for Nuclear Activities Control

CNCAN

Thank you
for your attention!!

