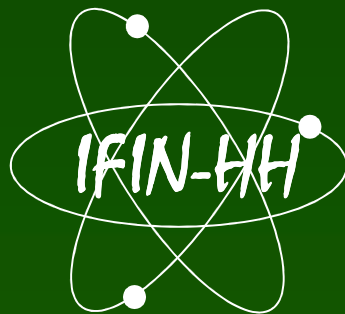


# IAEA INTERNATIONAL PROJECT R2D2P

WORKSHOP ON THE REVIEW OF A DECOMMISSIONING PLAN  
UNDER THE RESEARCH REACTOR DECOMMISSIONING  
DEMONSTRATION PROJECT.

BUCURESTI – MAGURELE, 4-8 JULY 2011

## PRE - REQUISITES FOR THE APPLICATION FOR A DECOMMISSIONING LICENSE



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# **1. LEGAL FRAMEWORK**

**1.1 Law No. 111/1996, republished**

**1.2. Decommissioning Norms for Research Reactors and Other Nuclear Installations (NSN 15)**

**1.3. Other Governmental Organization involved in getting the decommissioning License**

## 1.1 Law No. 111/1996 republished.

- Art.1. The object of the present law is the regulation, licensing and control of nuclear activities developed for peaceful purposes so to meet the safety nuclear requirements for the protection of the occupationally exposed personnel, of the population, the environment, and of the property, with minimal risks according to the regulation and satisfaction of the commitments in the agreements and conventions Romania is part of.
- Art.2 The provisions of the present law shall apply to the following activities and sources:  
Research, designing, sitting, production, construction, installation, commissioning, operation, modification, **decommissioning**, import and export of nuclear facilities and plants.
- Art.4. The jurisdictional national authority in the nuclear field with regulatory, licensee and control authorities upon the present law is the **National Commission for Nuclear Activities Control (CNCAN)** directly subordinated to the Romanian Government.

## 1.2. Decommissioning Norms for Research Reactors and Other Nuclear Installations (NSN 15)

- Art.1. Taking into account the provision of art.5 align (1) on Law No.111/1996 republished, the National Commission for Nuclear Activities Control (CNCAN), issue the present Decommissioning Norms for Nuclear Installation & Objectives.
- Art.3. The present Norms are applicable for decommissioning of following nuclear installations/objectives:
  - **Research Reactors**
  - Sub critical assembly
  - Radioactive waste treatment plant
  - Intermediate storage of spent nuclear fuel
  - Intermediate storage of radioactive waste.
- Art.4. The present Norms establish the requirements and steps necessary for decommissioning the nuclear installations stipulated in article 3, with the purpose of release from licensing regime.
- Annex 2 of the above mentioned norms shows the “**List of Documents** that must be submitted by the Licensee in order to obtain the Decommissioning License”.

## 1.3. Other Governmental Organization involved in getting the Decommissioning License

- 1.3.1 Ministry of Environment and Forests  
National Environment Protection Agency – for the **Environmental License**
- 1.3.2. Ministry of Health.  
County of Public Health Directorate of Bucharest.  
Ionizing Radiation Hygiene Laboratory – for the **Health License**
- 1.3.3. Ministry of Economy and Commerce  
State Inspection for Control of Boilers, Pressure Vessels and Hoisting – **for the Lifting Equipment License.**
- 1.3.4. Magurele City Hall and ILFOV County Town Hall – for the **Certificate of Urbanism.**

## **2. List of Documents that must be submitted by the Licensee in order to obtain the Decommissioning License.**

- 2.1 Application for the license;
- 2.2 Licensee Decision on the nomination of the responsible person for the nuclear installation during decommissioning;
- 2.3. Document to prove the technical capabilities and licenses required by the law for the organizations and persons involved in decommissioning activities;
- 2.4. Statement on financial and material capabilities as stated in the Decommissioning Plan;
- 2.5. Decommissioning Plan approved by CNCAN;
- 2.6. Jurisdictional Authority Decision on nuclear installation shut-off in view of decommissioning, published in official bulletin;
- 2.7. Documents on the transfer of the nuclear fuel from nuclear installation building;
- 2.8. The list of CNCAN licensed organization/companies involved in decommissioning activities, their responsibilities and the interface among themselves and the licensee.

- 2.9. The list of dosimetric equipment;
- 2.10. The list of radioactive sources;
- 2.11. Statement on the Safe Radwaste Management;
- 2.12. Personnel, Public and Environment Radiological Monitoring Program throughout the decommissioning process, including the related procedures;
- 2.13. Emergency Plan;
- 2.14. Quality Assurance Manual for decommissioning;
- 2.15. Approved safeguards procedures;
- 2.16. Physical Protection Program;
- 2.17. Approved Reporting Procedures;
- 2.18. Approved Radiological Characterization Procedures;
- 2.19. **Environmental License**;
- 2.20. **Health License** and other official documents as provided by law;
- 2.21. Document to prove the payment of the legal fees for decommissioning.

## 3.1. Ensuring the Funding

Statement on financial and material capabilities as stated in the Decommissioning Plan; (position 2.4. in list of documents)

- Romanian Government decision for financing the decommissioning project published in Romanian Official Monitor.

Based on the feasibility study: “Decommissioning of VVR-s nuclear reactor, repatriation of EK-10 spent fuel and modernizing of Radioactive Waste Treatment Plant”, the Romanian Government approves the technical and economical indicators (parameters) and decides to finance the project from the state budget. Based on the decision, DDR will receive an amount of money for every year of the project as stated in the feasibility study.



## 3.2. Environmental Safety

- 3.2.1. Environmental License
  - 3.2.2. Environmental Report
  - 3.2.3. Environmental Impact Report

## 3.2.1. Environmental License

- Issued by Ministry of Environment and Forests for the decommissioning of VVR-s Nuclear Reactor, rehabilitation of Waste Treatment Plant and National Radioactive Wastes Repository for the treatment, conditioning and final storage of radioactive wastes resulted from decommissioning.
- The whole document contains a description of activities to be developed during the decommissioning phases taking all the necessary actions to protect the environment.
- For getting this license, 2 preliminary reports were required from DDR:
  - Environmental Report
  - Environmental Impact Report

## 3.2.2. Environmental Report

- According to the Ordinance No.195/Dec.22.2005 – the Environmental Report is a document elaborated by authorized jurisdictional entities as per the law, in order to obtain the environmental license, including elements of the technical analysis to obtain data on the causes & consequences of the built-up negative effects prior, present and subsequent to the developed activities, in order to quantify the actual environmental impact on the site; in case that a significant negative impact is identified, the environmental report shall be accompanied by a risk assessment report.

### 3.2.3. Environmental Impact Report

- Risk assessment – A document elaborated by authorized jurisdictional entities as per the law, including an analysis on the probability & severeness of the main component impact on the environment and a statement of the necessity for preventing, intervention and for repairing actions.

## 3.3. Worker Safety

### Health License

**for the nuclear research reactor decommissioning is issued by Ministry of Health, Ionizing Radiation Hygiene Laboratory.**

**The license validity covers CNCAN license validity.**

# Documents for getting the Health License

The documentation prepared for getting the license is gathered in a technical file containing the following reports:

- Description of the radiological installation, nuclear materials in the installation, confined and open radioactive sources, other nuclear radiation generating devices.
- Site arrangement design; water supply, lighting, ventilation, heating, sanitary airlocks.
- Description of functional systems for occupational exposed personnel considering the sanitary and labor protection standards and for the safe development of the nuclear activities. The installation zoning.
- Description of work locations. Radwaste types & activities and their management.
- Description of radioprotection means: radioprotection shielding, dosimetric monitoring systems, emergency systems.
- Table of personnel occupationally exposed to ionizing radiations, signed by the specialist doctor following to a medical checking and analysis.
- Copies of the individual dosimetric control records.
- List of dosimetric instrumentation used in the installation and the individual checking instruments.

## 3.4. Certificate of Urbanism

- It represents an authorization for the construction or demolition of buildings issued by the local (Magurele) City Hall.

In case of IFIN-HH nuclear reactor the building is not demolished but its inside installation.

- The reason the license is required is for dismantling the installation inside the building and stopping the activities related to the reactor operation.
- Documentation for getting this license contains reports on the decommissioning activities and reactor building layout drawings approved by the Senior Architect of the City Hall.



**THE END**

**THANK YOU VERY MUCH  
FOR YOU'RE ATTENTION**