



The Programme Act of 28 June 2006 on Sustainable Management of Radioactive Materials and Wastes

French Ministry of Economy, Finance and Industry
General Directorate for Energy and Raw Materials

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Introduction

- ☞ **The law 's area: all of the radioactive materials and wastes (RMW).**
- ☞ **Principles: human health, safety and environment protection, today's generations responsibility.**
- ☞ **A three-point architecture:**
 - Implementation of a national policy on radioactive materials and wastes (RMW) management.
 - Reinforcement of transparency and democracy requirements.
 - Organisational and financing dispositions.

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National RMW Management Policy (1)

Definitions, Principles and Goals (article 2 to 5)

Principles (article 2):

« Article L.542-1 of the Environmental Code reads as follows:

« Art.L.542-1. - The sustainable management of any radioactive material and waste, resulting notably from the operation and dismantling of nuclear facilities using radioactive sources or materials, shall be carried out while ensuring the protection of human health, of safety and of the environment.

« Relevant means to ensure the final safety of radioactive waste shall be developed and implemented with a view to preventing or limiting the responsibilities to be borne by future generations.

« Any producer of spent fuel and of radioactive waste shall be liable for those substances, without any prejudice to the liability of their holders as people responsible for nuclear activities »

Main concepts definition (article 5)

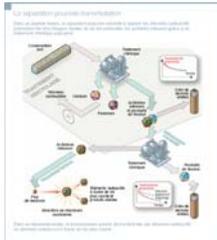
Research plans (1) (articles 3 et 4):

- Long-lived high or intermediate level activity radioactive wastes (article 3);

National RMW Management Policy (2)

Definitions, Principles and Goals (article 2 to 5)

Axe 1 - Partitioning and Transmutation



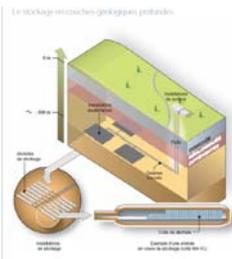
Assessment of the different industrial prospects of those systems

Start-up of a pilot facility

2012

Before December the 31st of 2020

Axe 2 - Deep Geological Disposal



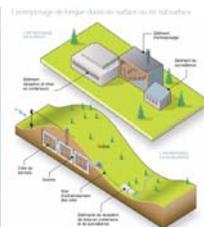
Review of the application for the authorisation to create a disposal centre

Start-up

2015

From 2025

Axe 3 - Storage



New storage facilities shall be created or existing ones shall be modified

By 2015

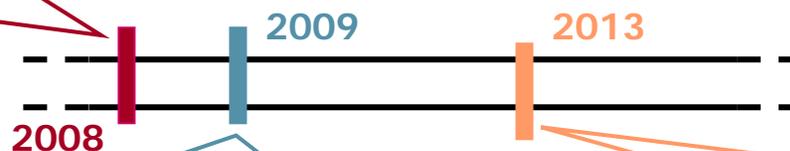
National RMW Management Policy (3)

Definitions, Principles and Goals (article 2 to 5)

Research plans (2):

– Other wastes category (*article 4*).

- Developing storage options for graphite and radium-bearing waste;
- Finalising the processes designed for the disposal of sealed sources in existing or future facilities;
- Summary report assessing the long-term impact of disposal sites for uranium-mines tailings and the implementation of a reinforced radiological monitoring plan for those sites.



Summary report describing short-term and long-term management options for waste containing reinforced natural radioactivity, and proposing new options.

Start-up of disposal facility for graphite and radium-bearing waste.

National RMW Management Policy (4)

Implementation

 **Creation of a national radioactive material and waste management plan updated every three years** (*article 6*)

 **Established by the Ministry in charge of Energy :**

- Consulting the different stakeholders (waste producers, research institutions, environment protection associations) ;
- Consulting the Ministry in charge of nuclear security and the Ministry in charge of environment.

 **Principles**

Reduction of the quantity and the toxicity of radioactive waste by

- processing spent fuel
- processing and conditioning radioactive waste

Storage as a pending solution

Disposal in deep geological formation as a long-term solution



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Transparency and Democracy Requirements (1)

(article 8 et 9)

Radioactive materials and wastes originating from foreign countries (*article 8*):

- disposal of radioactive waste originating from foreign countries in France is forbidden;
- spent fuel or radioactive waste is authorised to be introduced in France for processing, research or transfer between countries reasons only;
- authorisations of such spent fuel and radioactive waste given only within the framework of intergovernmental agreements.

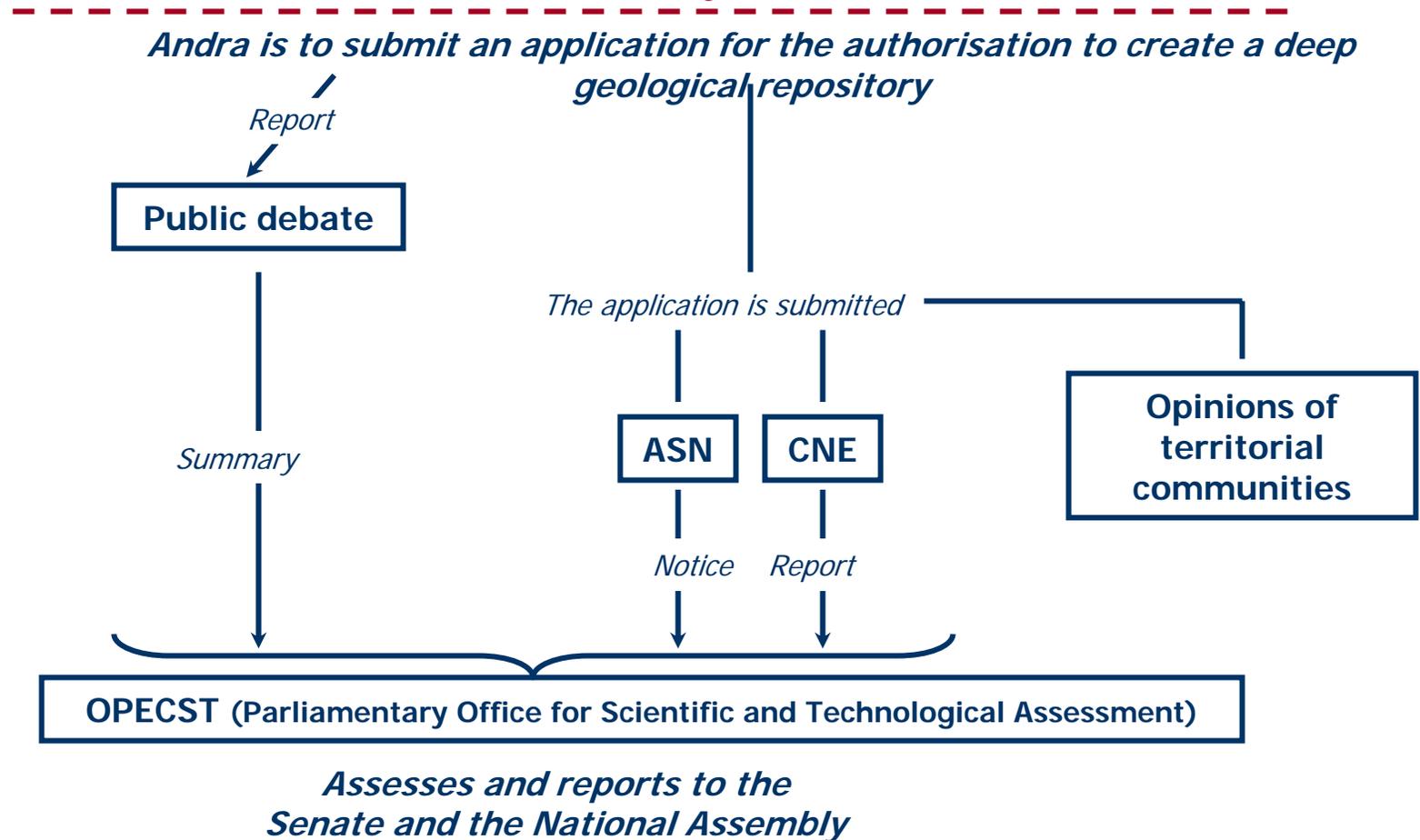
Research assessment by the CNE (National Evaluation Commission) (*article 9*):

- the composition is widened (international expert, human sciences);
- an annual report is given to the Parliament and is publicised;
- the investigation and studying power of the commission is reinforced.

Transparency and Democracy Requirements (2)

Disposal Facility Start-up Authorisation Process (article 12)

Geological formation that has been investigated through an underground laboratory



Transparency and Democracy Requirements (3)

Disposal Facility Start-up Authorisation Process (article 12)

The Government tables a draft act on the relevant reversibility conditions

Draft Act

Parliament

The Act on reversibility conditions is promulgated

Public enquiry

State council

Decree authorising the creation

Transparency and Democracy Requirements (4)

Changes in CLIS (Local information and monitoring committee) (article 18)



Extension of its competency field to the researches on the axis 1 and 3.



Extension of its composition:

- more union organisations;
- qualified personalities, labour unions of medical professions, elected officials from the territorial communities concerned by the preparatory research work of a disposal facility are added to the committee.



Concerning its organisation:

- can get the status of an association;
- privileged link with High Committee for Transparency and Information on Nuclear Security.



Headed by a national or local elected officer, as appointed by a joint decision of the president of the General Councils of the departments where the perimeter of the laboratory is located.



Financing in equal parts by State subsidies and the contributions of the companies involved in activities linked to the deep geological disposal of radioactive waste.

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Organisational and Financial Dispositions (1)

Implementation of the National RMW Management Policy

Main changes in the National Radioactive Wastes Management Agency (Andra) assignments (*article 14*):

- establishing the inventory and location of all radioactive material and waste in France;
- driving of researches and studies on storage and deep geological disposal;
- the take-over of “orphan waste”;
- assessment of the costs associated to the long-term management solutions implementation.

Financing (*article 15 et 16*):

- research on storage and deep disposal: a fund is constituted within Andra and dedicated to research and studies related to the storage and the geological disposal or radioactive waste»;
- building, operating, maintaining and monitoring of the storage and disposal facilities: with respect to the polluter-payer principle a fund will be established within Andra;
- orphan waste inventory and management: state subsidy.

Organisational and Financial Dispositions (2)

Economical Supports and GIPs (Public Interest Group) (article 13)

Assignments are widened:

- managing any equipment designed to favour or facilitate the implementation and operation of the underground laboratory or repository;
- implementing regional or economic development actions within the limit of the relevant department;
- supporting training initiatives as well as actions relating to the development, processing and diffusion of scientific and technological knowledge, notably in the fields linked to the underground laboratory and new energy technology.

Changes in their composition:

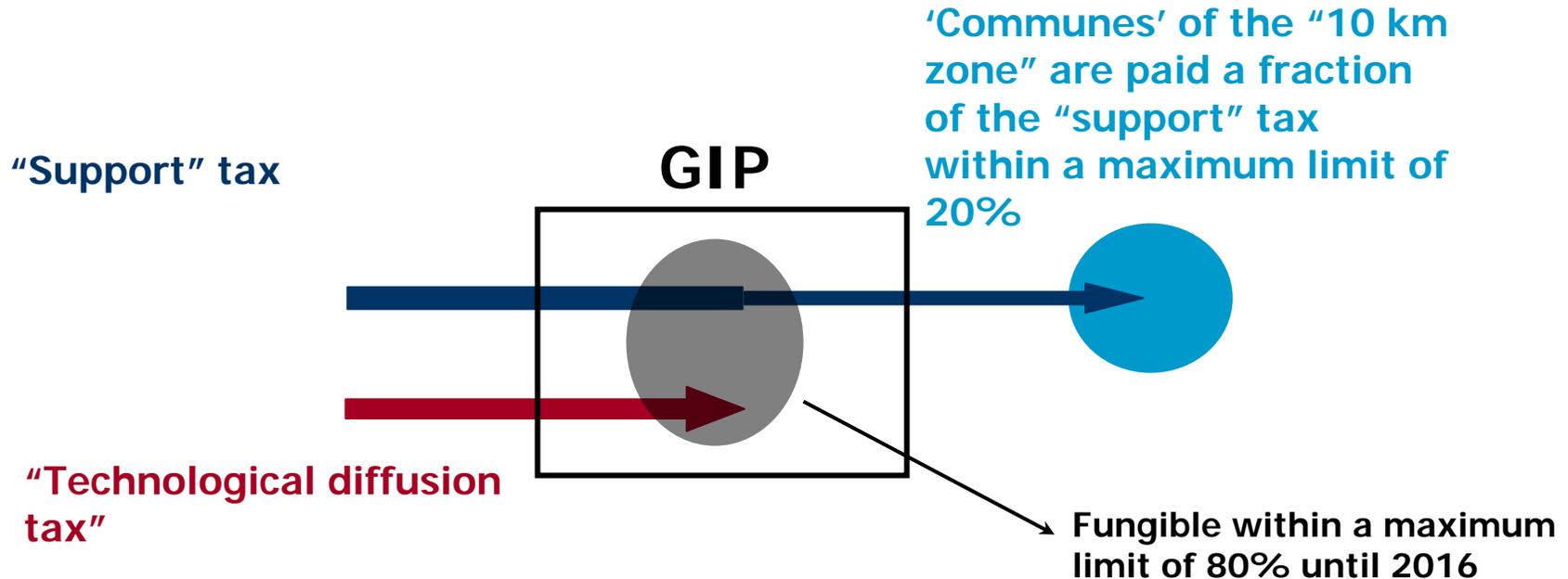
- widening of the perimeter of the communes which have the right to adhere ipso jure to the GIP (proximity zone);
- other communes can apply for the authorisation to become member of the GIPs.

Organisational and Financial Dispositions (3)

Financing of economical support (article 13 et 21)

New financial process :

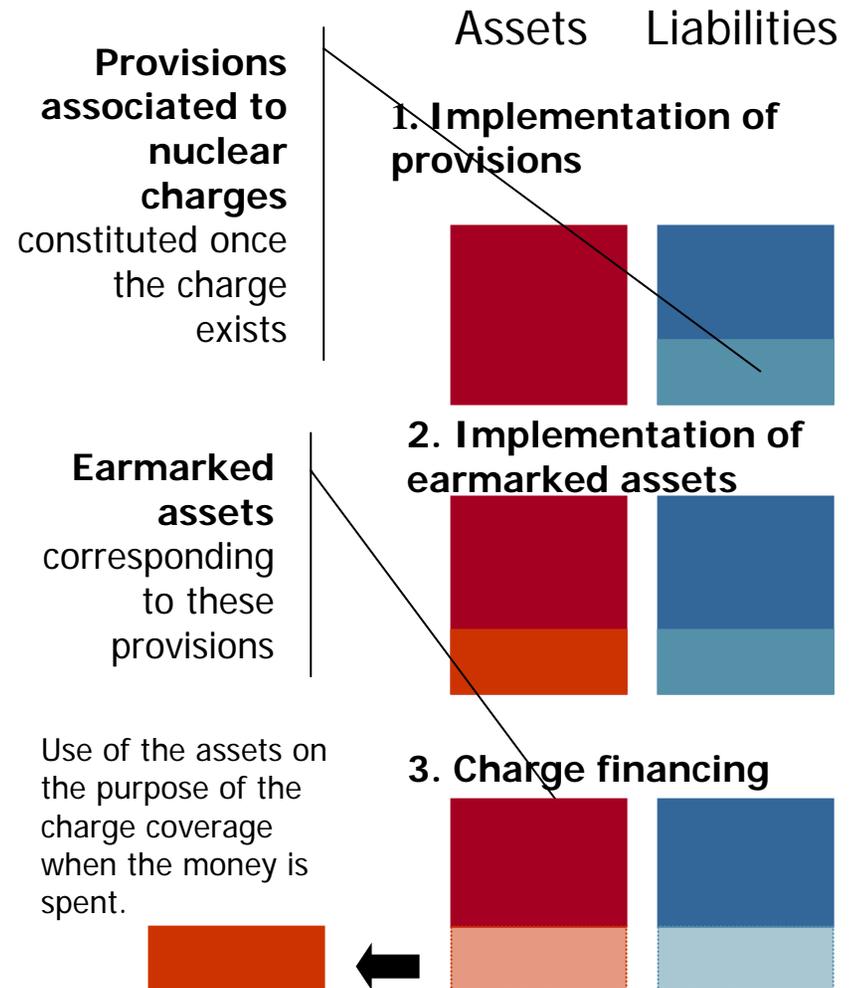
- creation of two additional taxes to the tax on basic nuclear installations, called "support" and "technological diffusion".



Organisational and Financial Dispositions (4)

Long Term Charges (article 20)

- Conservative assessment of long term charges of:
 - **dismantling**
 - **spent fuel**
 - **radioactive waste.**
- Earmarked assets except for the provisions linked to the operating cycle.
- Sufficient level of security and liquidity.
- Public instances control (a report is submitted to the administrative authority every three years).





Thank you for your attention.

End of the slides show

Organisational and Financial Dispositions (5)

Taxes (article 21)

Financing process of the three research axis (*article 21*).

- conventions et subsidies for the axis 1;
- additional tax called “research” to the tax on basic nuclear installations for the axis axes 2 and 3.

Three additional taxes

- « research »
- « support ».
- « technological diffusion »

Implementation details

- amount = lump sum \times factor (fixed by a decree)
- The factors shall be fixed on the basis of the quantities and the toxicity of the radioactive waste produced by each category of waste producer