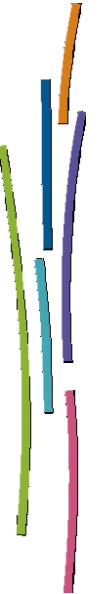


Preparing for Joint Programming - the French approach in identifying mandated actors

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Outline

1. Organisation of the French Radioactive Waste Management & mandated actors
2. French Actors interests & motivations in Joint Programming and JOPRAD

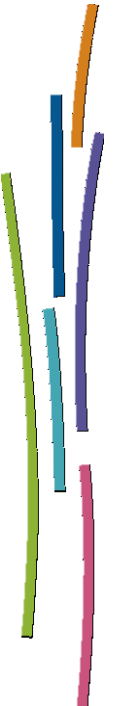
Radioactive waste management regulated by law since 1991 in France

Radioactive Waste (RW) management closely regulated and followed by the Parliament

- 1991 Waste act
- 2006 Planning act on radioactive materials and waste

These acts set the principles of the French RW policy

- sustainable management of RW of whatever nature, with due regard for the protection of health, safety, and the environment,
- Limitation of the burden borne by future generations,
- Responsibility of RW producers.



A specific institutional framework



Creation of a RW management agency : ANDRA

- Andra created in 1991, with a dedicated mission : to study, develop and manage routes for radioactive waste
- Independent from waste producers

Elaboration of a national inventory and a national plan every three years

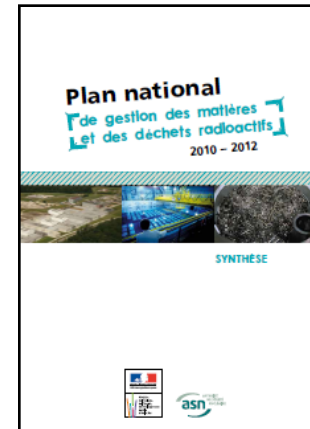
Securing long term nuclear costs :

- Nuclear licensees shall guarantee coverage of future costs by creating dedicated assets
- State controlled

The government develops RW principles through the elaboration of a national plan

A national plan elaborated every three years :

- PNGMDR 2007-2009, PNGMDR 2010-2012, PNGMDR 2013-2015
- PNGMDR 2016-2018 being finalised



A strategic roadmap for the overall management of the radioactive material and waste

- Deals with radioactive waste and materials of all sectors (nuclear power generated sector, defense, research, other industries),
- Deals with all types of radioactive waste

Implication of the stakeholders in the elaboration of the national program

A pluralist working group in charge of the elaboration, drafting and follow-up of the national plan :

- Co-directed by the Ministry of Ecology, Sustainable Development and Energy and the Nuclear Safety Authority (ASN)
- All stakeholders are involved : Andra, RW producers, TSO, Research Entities, Representatives of the civil society, Ministry representatives, etc...

Sub-working groups on thematic subjects : sealed sources, RW routes optimization, etc

Follow-up by the working group of the results of the main studies asked by the national plan



A Strategic tool to detail, implement and follow-up the principles defined by law

States the principles and objectives of the management of radioactive material and waste

Draws up an assessment of existing and developing waste management routes

Gives the actions to be developed in order to improve the radioactive material and waste management :

- Research and studies to be carried out
- Actions to be engaged
- Milestones

RW classification principles

Available on under	Very short lived waste containing radionuclides with a halflife of < 100 days			Short lived waste in which the radioactivity comes mainly from radionuclides with a half-life ≤ 31 years		Long lived waste containing mainly radionuclides with a half-life > 31 ans	
	Hundreds Bq/g	Very low level (VLL)	Management by radioactive decay on the production site then disposal through routes dedicated to conventional waste	Recycling or dedicated surface disposal (Industrial centre for collection, storage and disposal (Cires) disposal facility in the Aube département)			
Millions Bq/g	Low level (LL)	Surface disposal (Aube waste disposal facility)		Shallow depth disposal (being studied pursuant to the Act of 28 June 2006)			
Billions Bq/g	Intermediate level (IL)	Deep geological disposal (being planned pursuant to the 28th June 2006 Act)					
	High level (HL)						Not applicable ¹

A transparent approach

The national plan is public :

- The national inventory and the main reports requested in the framework of the plan are also public
- Synthetic report, geographical report, RW classification, etc..
- <http://www.developpement-durable.gouv.fr>
- <http://www.andra.fr/>

The national plan is transmitted to the Parliament :

- The Parliament Office for Assessment of Scientific and Technological Options gives its evaluations and comments on the plan

A ministerial decree gives to the national plan a legal basis :

- Endorses the main recommendations



A close follow-up of RW issues

Implication of the Parliament, which regularly controls and evaluates the process :

- Over 30 reports on nuclear safety, radioactive waste and related subjects written by the Parliamentary Office on Scientific Choices since 1990

Annual scientific evaluation by the CNE (Commission Nationale d'Evaluation) :

- 12 scientific members, halfly renewed every 3 years
- Evaluations conducted on the basis of audits of RE involved in RW R&D : Andra, CEA, CNRS, ...

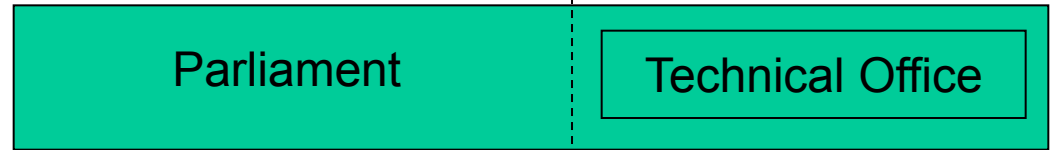
Evaluation and control by the Nuclear Safety Authority (ASN)

Follow-up by the High Comity for Transparency and Information on Nuclear Safety (HCTISN)

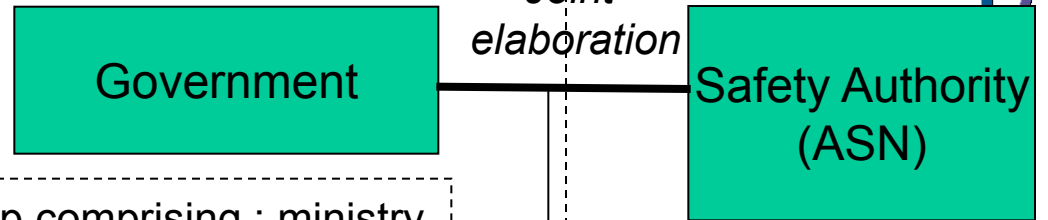


Overall Organisation

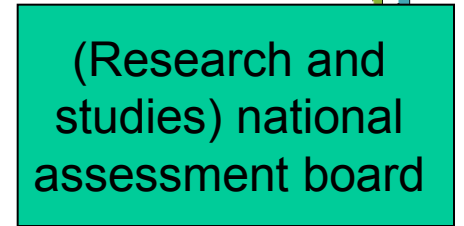
Definition of RW management principles in law



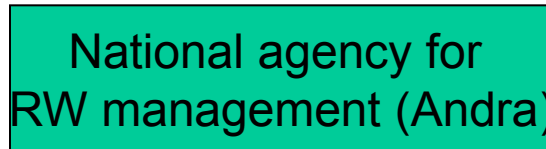
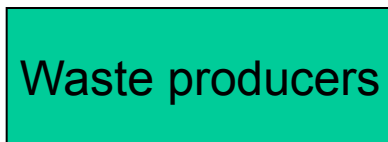
Elaboration of a RW national plan



Working Group comprising : ministry representatives, licensees, civil society representatives, Andra, etc.

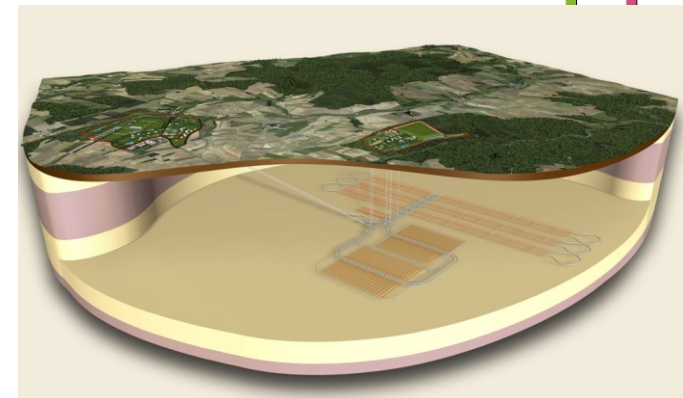


Implementation of the RW national plan



Key issues for the national plan for 2016-2018

- Strategic environmental assessment of the 2016-2018 plan
- Introduction of monitoring indicators to follow the implementation of the Euratom 2011/70 Directive on the management of spent fuel and RW
- Waste recovery : supplementary investigations required to strengthen the waste recovery scenarii & storage capabilities and prospects
- Very Low Level Wastes (VLL) : consolidation of dismantling scenarii & case study for metallic materials
- CIGEO deep geological disposal project for spent fuel and high levels (HL) and intermediate level long-lived (IL-LL) wastes :
 - Preliminary design accomplished end 2015, the project enters a final design phase : 2016 -> 2017
 - Costs publication of the deep geological disposal project CIGEO (design, construction and operation) : 25Md€ (EC 2011)
15/1/2016



Closing points : France mandated actors interests in Joint Programming and JOPRAD

A supplementary opportunity for France and mandated actors to promote transparency on their activities, at the European level

Benefit from collaborative joint programming :

- with European actors in countries that already benefit of well established geological disposal programs,
- with all actors in less advanced program countries that are willing to develop geological disposal capabilities,

... to benefit of joint and therefore complementary and coordinated efforts

Strong support, encouragement and high expectations from the Ministry of Ecology, Sustainable Development and Energy to the JOPRAD initiative :

- organisation of regular JOPRAD French mirror meeting to coordinate the French mandated actors, including WMO, TSO and RE and
- coordination of the French R&D activities with cross-European joint R&D programs