# The EU Directive on Nuclear Waste Which Criteria for Responsible Waste Management?

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Greens-EFA Hearing, European Parliament, Brussels

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## Origin of November 2010 Draft Directive (1)

EC "Green Paper" 2000: "Towards a European strategy for the security of energy supply"

"Nuclear cannot develop without a consensus that gives it a long enough period of stability, bearing in mind the economic and technological constraints of the industry. This will only be the case when the waste issue finds a satisfactory solution with maximum transparency. Research in this area should be oriented towards waste management".

Source: EC, November 2000

## Origin of November 2010 Draft Directive (2)

#### "Nuclear Package" 2002:

- Safety, Decommissioning, Waste Management
- Technical, Financial, Legal, Trade Aspects

"It is our responsibility to ensure a common approach to nuclear safety and waste management: European citizens would never forgive us for inaction by the EU in this field".

#### Loyola de Palacio

Commission Vice-President responsible for energy and transport Brussels, 6 November 2002

#### **Commission Explanation of Proposal for Framework Directive 2002**

"This proposal gives priority to geological burial of waste as the safest method of disposal known at present.

Member States will have to adopt, according to a <u>pre-set</u> <u>timetable</u>, national programmes for the disposal of radioactive wastes including, in particular, deep burial of highly radioactive wastes.

They will have to decide on <u>burial sites</u> (whether national or shared by several Member States) for highly radioactive wastes <u>by 2008 at the latest</u> and to have the sites <u>operational at the latest by 2018</u>."

Source: EC. 6 November 2002

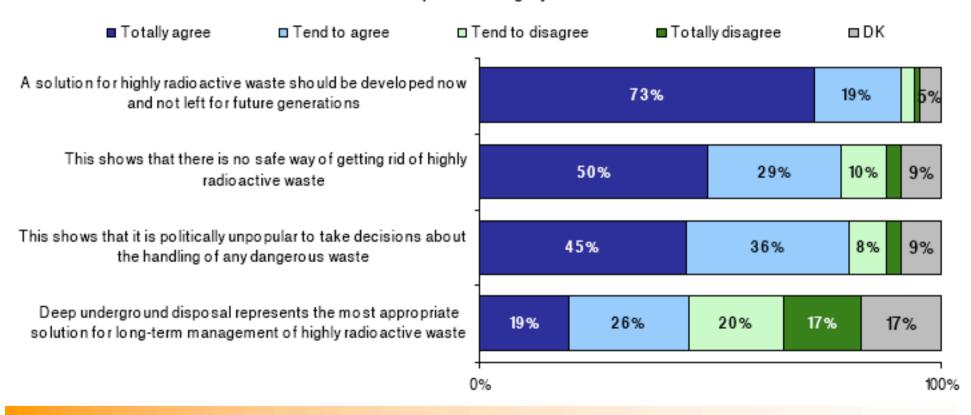
**Opinion Studies: Key Element for Commission's Strategy Development** 

"The justification for, and advisability of, EU funding for nuclear research is accepted by a wide margin, in particular with the aim of resolving the waste problem and increasing power station safety".

EC, Eurobarometer, December 2002

#### "A solution for highly radioactive waste should be developed now..."

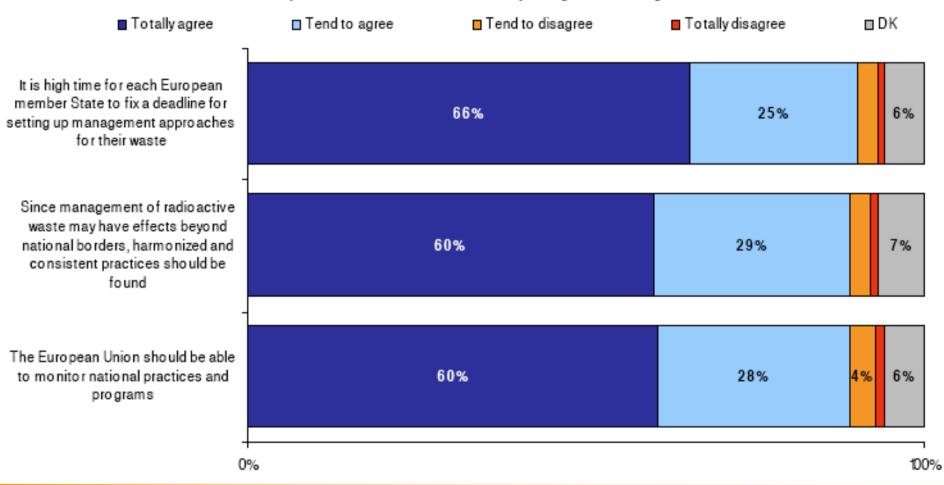
Q11. For the moment, with some exception, most of the countries have not taken a decision on the final disposal of highly radioactive waste. % E U



Source: EC, Eurobarometer 227, 2005

#### "High time for national approaches... Harmonized practices... EU monitoring"

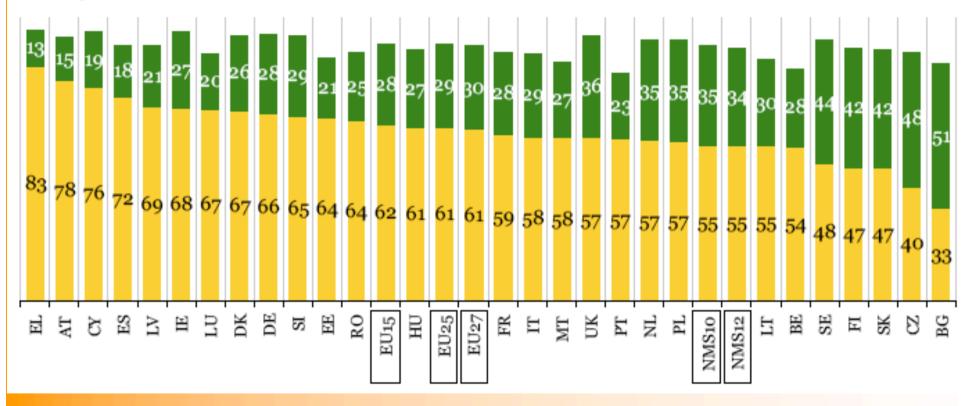
Q15. In the European Union, each member State remains fully responsible for the management of its own radioactive waste. For each of the following statements concerning this question, please tell me to what extent you agree or disagree.



Source: EC, Eurobarometer 227, 2005

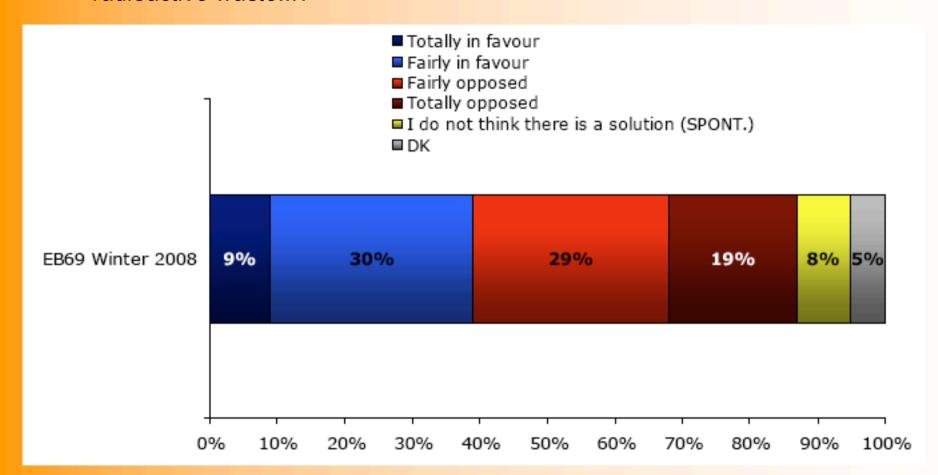
#### "Nuclear share should decrease because it poses problems like nuclear waste..."

- The share of nuclear energy should be increased, as it does not contribute to climate change and global warming
- The share of nuclear energy should be decreased, as it poses safety problems like nuclear waste, or the danger of accidents



Source: EC, Eurobarometer 206, 2007

"And if there was as a permanent and safe solution for the management of radioactive waste...?



Note: Base is the respondents that are fairly or totally opposed to nuclear power.

## According to French Nuclear Group AREVA the EC Waste Directive will "contribute to the acceptance of nuclear power"

#### Denis Hugelmann

Vice-President, AREVA
European Parliament,
ITRE-Hearing on Nuclear Waste
1 December 2010

#### **Commission "Defensives"**

#### **Commission Confidential Explanatory Wording for Draft Directive 2010**

- "There is no doubt that (...) spent fuel and radioactive [waste] can always be safely managed if the necessary political decisions and implementing steps are undertaken."
- "Only in 6 Member States, the majority of citizens judge the benefits [of nuclear power] to be higher than the risks. (...) The figures show that nuclear energy is highly controversial in quite a number of Member States..."
- "For geological disposal it had to be proven that
- 1) [it] is achievable and appropriate and
- 2) that its long-term post-closure safety can be successfully demonstrated in a safety case for a very long time period (e.g. a million years).

There is now broad consensus (...) that deep geological disposal is the most appropriate solution for long-term management...(...)

The protection of citizens and the environment is still ensured even when humans have lost the knowledge on the existence of the facility (which is a very likely case, given the long time periods involved)."

#### **Key Issues in the November 2010 Draft Directive (1)**

#### **Proposed Definition of "Radioactive Waste"**

"radioactive material in gaseous, liquid or solid form for which no further use is foreseen by the Member State or by a natural or legal person whose decision is accepted by the Member State and which is controlled as radioactive waste by a competent regulatory body under the legislative and regulatory framework of the Member State"

#### **Problems with the Proposed Definition of "Radioactive Waste"**

- Allows for practically unlimited "intermediate" storage (reprocessed, depleted uranium, plutonium)
- Excludes large parts of radioactive wastes from numerous activities:
  - uranium mining and milling;
  - military activities;
  - discharges into the environment of radioactive substances
- Does not rule out recycling of very low level radioactive waste materials
- Should place high priority on management of historic wastes

#### **Key Issues in the November 2010 Draft Directive (2)**

## Clear framework for decision making process missing (on assessment of management and disposal options); should include:

- Full and timely public access to comprehensive information
- Encouragement of multiple mechanisms for citizens' participation
- Absolute veto right for local populations on siting decisions

#### Cost assessment and fund availability

- Cost assessment by independent bodies
- Precise legal framework to guarantee timely fund availability

#### **Shipments and Reprocessing**

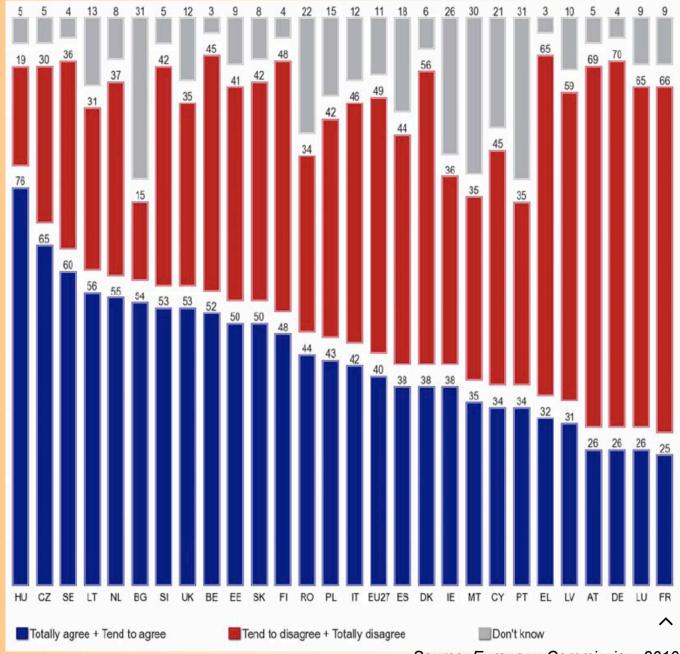
- Prohibition of spent nuclear fuel reprocessing (highly negative cost/benefit)
- Ruling out of international shipments of radioactive waste

#### **Outstanding Issues**

- Short-term vs. long-term concerns (f.ex. Asse)
- Environmental/health vs. security concerns
- Retrievability, reversibility
- Latent internationalisation

"The disposal of radioactive waste can be done in a safe manner..."

49% of EU-citizens polled disagree, 40% agree



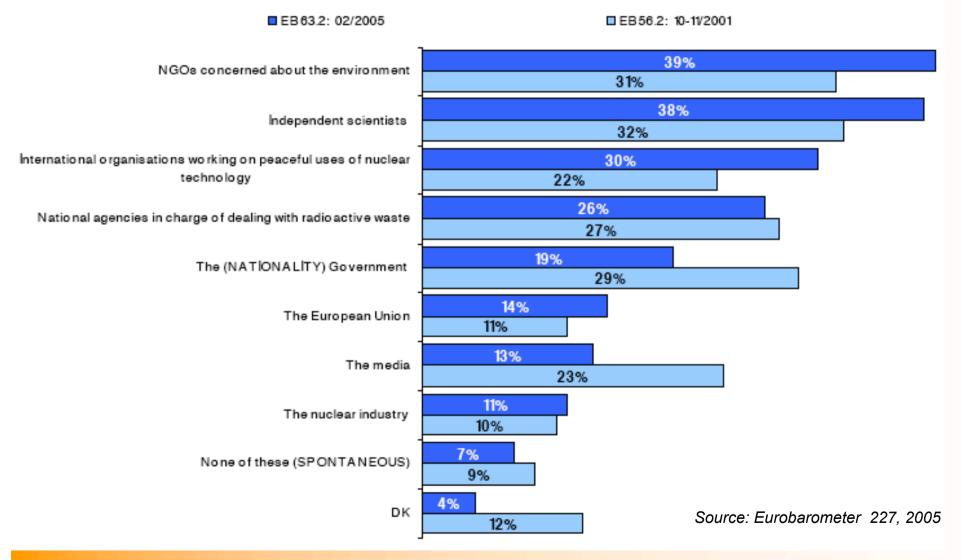
Source: European Commission, 2010

Thank you!

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#### "Who do you trust on information about radioactive waste management...?

Q12. Which of the following, if any, Would you trust to give you information about the Way radioactive Waste is managed in (OUR COUNTRY)? % EU

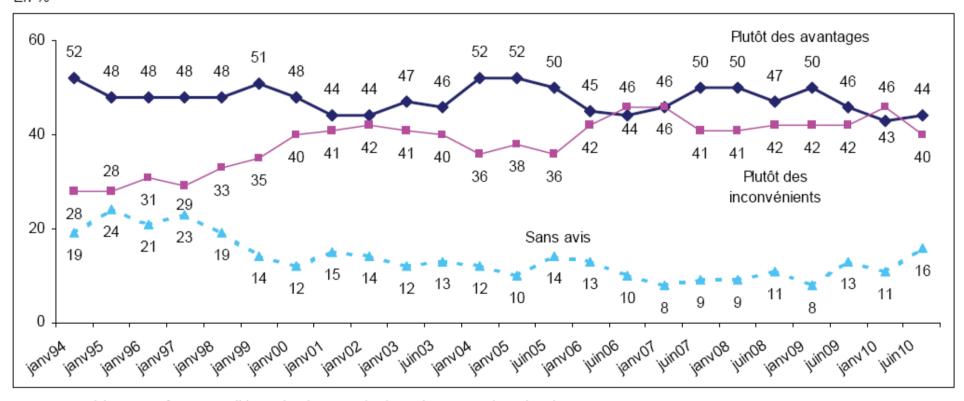


### **Public Opinion in France**

"The choice to generate three quarters of the electricity in France by nuclear power present rather advantages or disadvantages?"

Le choix du nucléaire pour produire les trois quarts de l'électricité en France présente-t-il, selon vous, plutôt des avantages ou plutôt des inconvénients ?

En %



Source : Crédoc, enquête « Conditions de vie et aspirations des Français », janvier 2010