

ROADMAP

Title of the initiative: **Revised draft proposal for legislation on the management of spent fuel and radioactive waste**

Type of initiative (CWP/Catalogue/Comitology): CWP

Lead DG/contact person/details: DG ENER-D2

Expected date of adoption of the initiative (month/year): October 2010

Date of modification:

Version No: 1

Initial IA screening & planning of further work

A. Context and problem definition

(i) What is the political context of the initiative?

The European Union's energy policy addresses the challenges of security of supply, limitation of greenhouse gas emissions and competitiveness of energy-reliant economies. The safe and sustainable management of spent fuel and radioactive waste is a precondition for development of the nuclear power programmes and will lead to the increase of the nuclear energy's competitiveness and its contribution to the security of supply. In view of the important role of the nuclear power production as a low-carbon technology, along with the renewable energies and carbon capture and storage, it will also contribute to achieving the European goals for clean energy and fighting the climate change.

President Barroso stated at the "International conference on access to civil nuclear energy", 8 March 2010, Paris:

- Les questions énergétiques et climatiques sont au centre de la stratégie que la Commission européenne propose à l'Union à l'horizon de 2020.
- La nouvelle économie durable de l'Union européenne passera notamment par la décarbonisation de notre approvisionnement en électricité. L'énergie nucléaire peut jouer un rôle d'autant plus important. Elle produit aujourd'hui deux tiers de l'électricité sans CO₂ en Europe.
- Pour créer des conditions d'une utilisation sûre, durable et optimale du nucléaire civil, il faut notamment traiter la question des déchets radioactifs. C'est une des préoccupations majeures de nos opinions publiques.

President Barroso announced at the same time: *"une initiative législative pour le traitement des déchets radioactifs avant la fin de cette année."*

(ii) How does this initiative relate to past and possible future initiatives, and to other EU policies?

In 2003, the Commission proposed two Council Directives (Euratom) dealing respectively with the safety of nuclear facilities and with the management of spent nuclear fuel and radioactive waste and, in 2004, resubmitted to the Council amended proposals (COM 2003/32 final and COM (2004)526 final). After long negotiations, the Council called for an "extensive consultation" with stakeholders before any instrument in this field would be developed in the framework of the Euratom Treaty (June 2004 Council conclusions on Nuclear Safety and Safe Management of Spent Fuel and Radioactive Waste, 10823/04).

As a first element on this road, the Council Directive establishing a Community framework for the nuclear safety of nuclear installations was recently adopted with the agreement of all 27 Member States and strong support from the European Parliament (Council Directive 2009/71/Euratom, OJ L 172, 2.7.2009, p. 18–22). As to radioactive waste and spent fuel management, the scope of the Safety Directive is limited to nuclear safety of storage facilities for spent fuel and to storage facilities for radioactive waste, which are on the same site and are directly related to nuclear installations.

In the framework of the Euratom Treaty, the existing Community legislation dealing with spent fuel and radioactive waste covers only a small range of the issues involved in their management, such

as the obligation to submit the general data relating to any plan for disposal of radioactive waste (Article 37 of the Euratom Treaty), the protection against ionising radiation (Directive 29/96/Euratom), supervision and control of shipments of radioactive waste and spent fuel (Directive 2006/117/Euratom) and the nuclear safety of the nuclear installations (Council Directive 2009/71/Euratom).

In order to fill this gap and following the successful adoption of the Council Directive on nuclear safety, the Commission has considered the re-launch of the process of establishing a Community framework on spent fuel and radioactive waste management.

What are the main problems identified?

All EU Member States generate radioactive waste (through research programmes, medical applications etc), whether or not they have a national nuclear power programme, and therefore have to formulate national policies for radioactive waste management and to establish legal, regulatory and organizational frameworks for their implementation.

Postponement of the taking of key decisions, referred to as "wait-and-see" policy, results in an unjustified delay in the management of spent fuel and radioactive waste. The timely implementation of disposal of radioactive waste (including spent fuel considered waste), as the end-point of radioactive waste management, is a crucial part of this management.

Who is affected?

The last Eurobarometer for radioactive waste (Special Eurobarometer 297 (2008)) confirmed that the unresolved question of radioactive waste is among the European citizens' major concerns related to the use of nuclear energy alongside nuclear safety and influences their attitude to nuclear energy. In view of the long time spans the management of spent fuel and radioactive waste require for implementation, national regulators, as well as industry, incl. nuclear power operators, and research organisations are affected.

(i) Is EU action justified on grounds of subsidiarity?

While it is for each Member State to choose whether or not to invest in nuclear energy, the nuclear safety and security framework applied everywhere in the EU is of common interest. The cross-border impact of nuclear energy and increased international cooperation requires the EU to maintain the highest safety, security, non-proliferation and environmental protection standards for nuclear generation. The EU therefore needs to develop the most advanced legislative framework with respect to the safety of nuclear installations and the management of spent fuel and radioactive waste.

Over the years, the support for the establishment of EU approach in nuclear safety and spent fuel and radioactive waste management has been constantly reflected by the Council and the European Parliament, and more recently by the European Nuclear Safety Regulators Group (ENSREG) and the European Nuclear Energy Forum (ENEF). It responds to the expectations of citizens that consider nuclear safety and spent fuel and radioactive waste an essential matter to be handled at EU level.

The proposed initiative will build on the principles followed by the Directive establishing a Community framework for the nuclear safety of nuclear installations, unanimously adopted in 2009 by all 27 Member States. It will be anchored on the competence existing in the Member States' regulatory authorities, as well as on the internationally endorsed principles of the IAEA Safety Fundamentals and the Joint Convention on Safety of Spent Fuel Management and on the Safety of Spent Fuel and Radioactive Waste Management. In addition, Member States retain the right to impose at national level more stringent measures than those provided for in the Community legal framework. Recognising their sovereign right to choose the spent fuel management policy and to regulate the management of spent fuel and radioactive waste, Member States are free to fully exploit the subsidiarity principle.

(ii) Why can the objectives of the proposed action not be achieved sufficiently by Member States (necessity test)?

It appears that the taking of key decisions on the long-term management of spent fuel and radioactive waste is often postponed due to reasons such as lack of political commitment, insufficient scientific, technical and financial resources and insufficient public information and participation. The Joint Convention is the first legally binding international treaty on the safety in spent fuel and radioactive waste management, but represents an incentive instrument and thus can not entail any sanctions for non-compliance. The IAEA Safety Standards are not legally binding for the Member States.

After the adoption of the Directive on nuclear safety, there is a need the existing Community framework on nuclear safety to be supplemented with a similar one for safe management of spent fuel and radioactive waste and thus to establish equal safety requirements applying to all spent fuel and radioactive waste management facilities throughout the Community.

(iii) As a result of this, can objectives be better achieved by action by the Community (test of EU Value Added)?

Yes. EU legislation, giving at Community level legal force to above internationally accepted principles and obligations would be a driver for Member States to take the necessary decisions and to define the requirements and steps to ensure the safe and sustainable management of spent fuel and radioactive waste in the long term. It would benefit Member States, as it would give them a reference for their national approaches. It would benefit the national regulatory authorities as it would ensure that they get enough means for their work and give them a driving role in implementing the common EU rules.

B. Objectives of EU initiative

What are the main policy objectives?

The general policy objective is to achieve and maintain management of spent fuel and radioactive waste as an integral part of the safe and sustainable use of the nuclear energy for nuclear power production and of the ionising radiation in medicine, industry, research and education, through:

- sustained political commitment for continuing improvement of the management of all types of civilian radioactive waste and spent fuel;
- transposition of the political decisions into clear provisions for implementation of all steps on radioactive waste and spent fuel management up to disposal
- modern governance concepts, based on a stepwise approach and early involvement of the stakeholders in decision-taking, ensuring sound public information and consultations.

Regular reporting required on progress achieved.

Do the objectives imply developing EU policy in new areas or in areas of strategic importance?

No.

C. Options

(i) What are the policy options?

Policy option 0: consists in keeping the current situation unchanged ("do nothing"). This is the business-as-usual scenario.

Policy option 1: consists in strengthening the internationally accepted principles and requirements, laid down the IAEA Safety Fundamentals and the Joint Convention, for the management of radioactive waste and spent fuel throughout the Community. This option consists of the establishment at EU level of general overarching requirements for a Community framework for spent fuel and radioactive waste management, as well as of a set of associated requirements for implementation at national level (national framework).

Policy option 2: consists in strengthening the internationally accepted principles and requirements, laid down the IAEA Safety Standards and the Joint Convention, and establishing

specific requirements for national programmes for spent fuel and radioactive waste management. This option includes the approach proposed by policy option 1, but in addition it foresees a third set of conditional requirements for scope, contents and review of national programmes for spent fuel and radioactive waste management. The national programme may be a reference document or a set of documents. A deadline for the establishment of the national programmes is foreseen.

(ii) What legislative or 'soft law' instruments could be considered?

Possible instruments include both non-binding and binding ones, including a revised proposal for a Directive (based on 2004 amended proposal).

L'approche politique sera donc comparable à celle utilisée avec succès pour la Directive sûreté. Elle implique une coopération active tant avec l'AIEA qu'avec les régulateurs, ce qui est déjà le cas. En outre, le Conseil et le Parlement devraient s'associer largement à cette démarche.

En même temps, la nouvelle proposition devra s'appuyer sur une approche réaliste, compte tenu des grandes différences entre Etats membres. Ceci devrait conduire à exclure l'imposition d'une date unique pour les sites de dépôts en couches géologiques profondes pour les déchets hautement radioactifs.

(iii) Would any legislative initiatives go beyond routine up-date of existing legislation?

Yes, as existing Community legislation dealing with spent fuel and radioactive waste covers only a small range of the issues involved in their management.

Does the action proposed in the options cut across several policy areas or impact on action taken/planned by other Commission departments?

No.

Explain how the options respect the proportionality principle

Policy options 1 and 2 provide a framework and do not go beyond what is clearly needed to achieve the objectives.

D. Initial assessment of impacts

What are the significant impacts likely to result from each policy option (cf. list of impacts in the Impact Assessment Guidelines pages 32-37), even if these impacts would materialise only after subsequent Commission initiatives?

Policy option 0: Although spent fuel and radioactive waste are currently safely managed, "do nothing" may not guarantee this will continue in the future, even in the short term. Wait-and-see policies will lead to increasing efforts to ensure safety, preservation of knowledge and financing. Differences in strategies and fund management may lead to a distortion on the liberalised EU energy markets. Finally, the lack of social acceptance of the current situation will prevail.

Policy option 1: Improvement of national frameworks for spent fuel and radioactive waste, strengthening of the objectives of the existing Commission Recommendation on the management of the financial resources for the decommissioning of nuclear installations, spent fuel and radioactive waste management, and meeting expectations of the public, such as for monitoring and harmonisation of the national practices, better information and public involvement in decision-making.

Policy option 2: Assurance that workers and the general public are protected against dangers arising from ionizing radiation now and in the future without imposing undue burdens on future generations and compromising the ability of future generations to meet their own needs; detailed requirements for basis and hypothesis of cost calculations and a time cost profile will provide the basis for a cost/benefits analysis of the solutions proposed and assess the needs of financing; fully meeting public expectations for the Member States to be responsible for the management of their own radioactive waste according to management plans with specific fixed deadlines; enhanced transparency; clarity on the decision-making process; assurance of state-of-the-art solutions.

Could the options have impacts on the EU-Budget (above 5 Mio €) and/or should the IA also serve as the ex-ante evaluation, required by the Financial Regulation?

No

Could the options have significant impacts on (i) simplification, (ii) administrative burden or on (iii) relations with third countries?

No. Euratom and all EU Member States with exception of Malta are Contracting parties to the Joint Convention. All EU Member States are members of the IAEA and participate in the adoption of the IAEA's Standards.

Following the successful adoption of the Directive on nuclear safety in June 2009, it will constitute the second pillar for the most advanced legal framework for safe use of nuclear energy throughout the Community.

E. Planning of further impact assessment work

When will the impact assessment work start?

The impact assessment work was started already in 2009.

(i) What information and data are already available?

The Commission has published a series of Situation Reports on the management of spent fuel and radioactive waste in the EU, the last one in 2008.

Furthermore, a dedicated study on Regulations Covering Radioactive Waste Disposal in EU Countries finalised in 2006 has been considered in the preparation of the current Impact Assessment. The consultant provided assistance in order to advise the Commission on how waste disposal regulations might be better harmonised between the Member States.

In addition numerous international research projects, studies and working groups have provided a

broad scientific, technical and societal knowledge base supporting the objectives of the initiative.

(ii) Will this impact assessment build on already existing impact assessment work or evaluations carried out?

The impact assessment is beyond others building on the consultations and discussions on the Directive proposed in 2003 and the amended proposal adopted in 2004 and the subsequent extensive consultations with stakeholders.

(iii) What further information needs to be gathered?

None.

(iv) How will this be done (e.g. internally or by an external contractor) and by when?

N/A.

(v) What type and level of analysis will be carried out (cf. principle of proportionate analysis)?

N/A

Which stakeholders & experts have been/will be consulted, how and at what stage?

The management of spent fuel and radioactive waste has been addressed by means of extensive consultations at EU level under different initiatives, such as:

- the Concil Working Party on Nuclear Safety (WPNS),
- the European High Level Group on Nuclear Safety and Waste Management (ENSREG) - composed of senior officials from national regulatory or safety authorities competent on the safety of nuclear installations and of spent fuel and radioactive waste management and a Commission's representative;
- and the European Nuclear Energy Forum (ENEF) - gathers all relevant stakeholders in the nuclear field, such as governments of all 27 EU Member States, European Institutions including the European Parliament and the European Economic and Social Committee, nuclear industry, electricity consumers and the civil society.

In addition, the Commission will conduct an Open Public Consultation via an on-line questionnaire.

L'approche politique sera donc comparable à celle utilisée avec succès pour la Directive sûreté. Elle implique une coopération active tant avec l'AIEA qu'avec les régulateurs, ce qui est déjà le cas. En outre, le Conseil et le Parlement devraient s'associer largement à cette démarche.