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COMMISSION STAFF WORKING DOCUMENT SUMMARY OF THE IMPACT ASSESSMENT

Accompanying document to the

revised proposal for a COUNCIL DIRECTIVE (Euratom)
on the management of spent fuel and radioactive waste

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SUMMARY OF THE IMPACT ASSESSMENT

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1. Introduction

This impact assessment accompanies a revised proposal for legislation on the management of spent fuel and radioactive waste in the European Union, included in the Commission's work programme 2010. In the European Union, spent fuel and radioactive waste arising from civil nuclear activities are dealt with under the Euratom Treaty.

In 2003, the Commission proposed a Council Directive (Euratom) dealing with the management of spent nuclear fuel and radioactive waste and, in 2004, submitted an amended proposal to the Council. After lengthy discussions, the Council called in its June 2004 conclusions on Nuclear Safety and Safe Management of Spent Fuel and Radioactive Waste for 'extensive consultation' with stakeholders before proceeding with any legislation on this matter under the Euratom Treaty.

The Commission therefore undertook extensive consultation through different EU-wide initiatives in response to the Council's request. It consulted governments, national regulators, radioactive waste management organisations, radioactive waste producers and others in the Member States. Other EU institutions, non-governmental organisations and other partners were also consulted. A detailed contribution made by the European Nuclear Safety Regulators Group (ENSREG) was taken into account. This was of key importance, given the specific competence of ENSREG, which represents national authorities competent on the safety of nuclear installations and of spent fuel and radioactive waste management, in Member States with and without nuclear power programmes. Special attention was given at the same time to the societal dimension through various public consultations, including dedicated Eurobarometer polls and an open public consultation. Radioactive waste is one of the major concerns of EU citizens. A large majority are in favour EU legislation.

2. PROBLEM DEFINITION

All Member States produce radioactive waste. Radioactive waste and spent fuel are generated in many beneficial activities, such as nuclear power production and a range of radioisotope applications in medicine, industry, agriculture and research. More than half of the Member States have nuclear power plants in operation. There are nuclear reactors under construction and under decommissioning, and plans for new builds. Radioactive waste, including spent

fuel considered as waste, requires containment and isolation from humans and their living environment for a very long time.

Whatever the future of nuclear power and non-power applications, the 'end point' of the management of all existing and future radioactive waste must be disposal in appropriate facilities, in order to ensure both safety and sustainability. This obligation cannot be left to future generations. The technical consensus world-wide is that storage of spent fuel and radioactive waste, even long-term storage, is an interim solution requiring permanent active control. It does not represent an alternative to disposal, with its inherent passive safety features.

Despite this consensus and developments in the EU, the International Atomic Energy Agency (IAEA) and the Nuclear Energy Agency, key decisions on managing spent fuel and radioactive waste up to the end point are often still postponed. In many countries, this 'wait-and-see' policy constitutes the main problem. To overcome this situation there is a need for political commitment, public information and participation in decision making, as well as sufficient scientific, technical and financial resources.

3. ANALYSIS OF SUBSIDIARITY

The issue of spent fuel and radioactive waste management is clearly an area where national legislation has to be supplemented by EU legislation due to its cross-border aspect of the safety. At the same time, the internal market requires the Commission to ensure a level playing field to avoid distortion of competition.

Existing EU legislation does not cover all activities and facilities related to the management of spent fuel and radioactive waste in the long term, neither aspects such as national policies and their implementation, nor public information and participation in the decision-making process. As a consequence, the existing instruments at EU level do not cover this field sufficiently.

Following adoption of the Directive 2009/71/Euratom establishing a Community framework for the nuclear safety of nuclear installations with support by all 27 EU Member States and the European Parliament, the development of secondary EU legislation on spent fuel and radioactive waste management is the logical next step.

The Safety Standards developed and adopted by the IAEA in collaboration with other organisations are not legally binding and their incorporation into national legislation is voluntary. The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste management, made under the auspices of the IAEA, is the most significant international Treaty in the field of spent fuel and radioactive waste management. All EU Member States (except Malta) and the Euratom Community are Contracting Parties. However, the Joint Convention does not entail any sanctions for non-compliance. This means in summary, that the internationally accepted principles and requirements, laid down in the IAEA Standards and the Joint Convention, do not guarantee a uniform approach at EU level due to missing enforceability.

Thus, at present, the management of spent fuel and radioactive waste remains a national responsibility. Further improvement is needed as to actions at national level in most Member States to ensure responsible management of spent fuel and radioactive waste.

4. OBJECTIVES OF EU INITIATIVE

The general policy objective is to set up a EU legal framework for the 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, agriculture, research and education. The specific objectives in respect of achieving the general policy objective are:

- to ensure that workers and the general public are protected against dangers arising from ionizing radiation now, in the future and beyond national borders
- to implement the highest safety standards for radioactive waste and spent fuel management;
- to avoid imposing undue burdens on future generations;
- to achieve sustained political commitment for the management of spent fuel and radioactive waste in the long term;
- to ensure a transposition of the political decisions into clear provisions for implementation of all steps on radioactive waste and spent fuel management from generation to disposal;
- to achieve and maintain continuing improvement of the management system, based on stepwise decision-taking and social acceptance.
- to ensure adequate, available when needed and transparently managed financial resources in accordance with the polluter-pays principle.

5. POLICY OPTIONS

Three policy options are analysed in detail.

Policy option 0 consists in keeping the current situation unchanged ('do-nothing').

Policy option 1 consists in strengthening at EU level the internationally accepted principles and requirements for radioactive waste and spent fuel management, laid down in the Safety Standards of the International Atomic Energy Agency and in the Joint Convention, by rendering them both legally binding and enforceable at EU level.

This approach includes the establishment of:

- a Community framework which formulates the general principles governing the management of spent fuel and radioactive waste in the EU;
- national frameworks for spent fuel and radioactive waste management which allocate responsibilities and provide for coordination between relevant state bodies in the long term.

Policy option 2 goes beyond policy option 1 by establishing in addition specific requirements for national programmes for radioactive waste and spent fuel management in the Member States.

These requirements include scope, contents and review of national programmes for spent fuel and radioactive waste management.

6. ASSESSMENT OF IMPACTS

Policy option 0 would require ever-increasing efforts for ensuring safety and knowledge preservation with time. It furthermore would entail increasing uncertainties and risks as to political commitments, financing, fading of know-how, social conflicts, etc possibly leading to disruptions in the safe operation of long-term storage facilities and the implementation of disposal. Thus, policy option 0 involves potential negative environmental, economic and social impacts with time, including undue burdens on future generations and a possible distortion of competition on the electricity market.

Policy option 1 would contribute to achieving a uniform high level of safety of spent fuel and radioactive waste management at EU level in the short term. Therefore, it would have positive environmental, economic and social impacts which, however, are certain only for the short term. It could not guarantee positive impacts in the long term, as that would depend on whether Member States timely plan and implement the disposal of their radioactive waste and spent fuel considered as waste.

Policy option 2 would result in achieving a uniform high level of safety of spent fuel and radioactive waste management at EU level in the long term, without imposing undue burdens on future generations and compromising the ability of future generations to meet their own needs. Only this option has positive long-term environmental, economic and social impacts.

7. COMPARISON OF OPTIONS

Policy option 0 would not improve the situation as to 'wait-and-see' policies. It is the view of all Member States, the European institutions, major stakeholders and the public that 'do-nothing' is no valid option.

Policy option 1 would contribute to improving the management of spent fuel and radioactive waste at EU level in the shorter term as it makes the internationally accepted principles and requirements for radioactive waste and spent fuel management legally binding and enforceable at EU level. However, in the longer term, unjustified prolongations of the decision-making process and interim long-term storage cannot be excluded under this policy option. Thus, this option does not guarantee the long-term safety of spent fuel and radioactive waste management.

Only policy option 2 would guarantee the long-term safety, increase the transparency of the decision making process and thus the sustainable management of spent fuel and radioactive waste management. It is strongly supported by the stakeholders and the public, and it complies in the utmost degree with the positions of the Council and the European Parliament.

In the framework of the above considerations, policy option 2 appears to be the preferred one as it would guarantee the achievement of the general policy objective. It is also the most effective option to avoid distortion of competition.

8. MONITORING AND EVALUATION

The indicators of progress towards meeting the political objective are:

- status of implementing the requirements for establishing a national framework for spent fuel and radioactive waste management allocating responsibilities and providing for coordination between relevant state bodies in the long term, and
- status of implementing the requirements for scope, contents and review of national programmes for spent fuel and radioactive waste management.

Member States would report to the Commission on the implementation of these requirements, taking advantage of the review and reporting cycles under the Joint Convention. On the basis of the Member States' reports, the Commission will submit a report to the Council and the European Parliament on progress made.

Member States will invite an international peer review of their national framework and national programme with the aim of continuously improving the management of spent fuel and radioactive waste. Outcomes of any peer review will be reported to the Member States and the Commission.