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From: General Secretariat of the Council

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To: Delegations

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Subject: Waste management in non-energy uses of nuclear and radiological technologies
- Council Conclusions

Delegations will find in the annex the Council conclusions on Waste management in non-energy uses of nuclear and radiological technologies, adopted by the Environment Council at its 3741st meeting held on 19 December 2019.

COUNCIL CONCLUSIONS

on waste management in non-energy uses of nuclear and radiological technologies

Acknowledging

- that nuclear and radiological technologies play an important role outside the nuclear energy sector in vital areas, such as medicine, industry, agriculture, space, research and environment, providing numerous benefits to the EU citizens and aware of the significant contribution that nuclear science can make to addressing societal challenges;
- that Euratom legislation requires that non-energy use of nuclear and radiological technologies is appropriately justified, the radiation protection of the public, patients and staff is optimised and that radioactive waste and spent fuel are safely managed and disposed;
- that activities in nuclear and radiological technologies produce spent fuel and/or radioactive waste in all Member States;
- Council Directive 2011/70/Euratom of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste to avoid imposing undue burdens on future generations;
- Council Directive 2006/117/Euratom of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel, so as to guarantee the adequate protection of the population;
- Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations and Council Directive 2014/87/Euratom of 8 July 2014 amending Directive 2009/71/Euratom;

- Joint Convention on the safety of spent fuel management and on the safety of radioactive waste management;
- the Member States' national programmes for management of spent fuel and radioactive waste covering all types of spent fuel and radioactive waste under their jurisdiction and all stages of their management from generation to disposal;
- the Member States' reports on the implementation of Council Directive 2011/70/Euratom and reports on the implementation of Council Directive 2006/117/Euratom;
- the Contracting Parties' national reports on Joint Convention on the safety of spent fuel management and on the safety of radioactive waste management;
- the Council conclusions of 2019 on the non-power nuclear and radiological technologies and applications;
- NOTING the report on European Study on Medical, Industrial and Research Applications of Nuclear and Radiation Technology (ISBN 978-92-79-99659-7);
- NOTING the ongoing work on Benchmarking Analysis of Member States Approaches to Definition of National Inventories of Radioactive Waste and Spent Fuel;
- NOTING the work done in Euratom Research and Training 2014-18 and under the current Euratom Work Programme 2019-2020; in respect with the research and development of technologies and competencies in relevant areas such as waste management and radiation protection;
- NOTING the outcomes of the SAMIRA workshop on Management of spent fuel and radioactive waste arising from non-energy uses of nuclear and radiological technologies organised by the Commission and Finland's Presidency of the Council of the European Union in Brussels in November 2019;
- NOTING the outcomes of the workshop on Benchmarking analysis of Member States approaches to definition of national inventories radioactive waste and spent fuel organised by the Commission in Brussels in November 2019.

The Council of the European Union,

1. WELCOMES the preparatory work undertaken by the Commission with a view to developing a Strategic Agenda for Medical, Industrial and Research Applications (SAMIRA) of nuclear and radiological technology.
2. ACKNOWLEDGES that the non-energy uses of nuclear and radiological applications have a positive effect on the health of the society. Therefore, the full life cycle of non-energy use of nuclear and radiological applications should be considered when applied.
3. NOTES that there are different types of waste streams from non-energy uses of nuclear and radiological technologies. Typically, waste is generated in small amounts at distributed locations and with various types and properties, and waste management will extend over the coming decades.
4. NOTES that the waste management needs in the Member States stem from various activities in the society. These are e.g. spent fuel from research and test reactors, radioactive waste from operation and decommissioning of research facilities, radioactive waste from the production of radioisotopes, radioactive waste from medicine, and disused sealed sources.
5. HIGHLIGHTS the importance of minimizing the amount and activity of radioactive waste, as reasonably practicable and in accordance with national policies and community law, and of developing and commissioning of new waste management technologies or facilities.
6. HIGHLIGHTS that, without prejudice to the ultimate responsibility of the Member States in handling, storage and disposal of radioactive waste generated in their territories, ensuring responsible and safe handling, storage and disposal of waste should be a priority in all national level and supranational activities.

7. HIGHLIGHTS the responsibility of the Member States to have a national policy for radioactive waste management including radioactive waste and spent fuel originated from non-energy uses of nuclear and radiological technologies.
8. RECOGNIZES that a graded approach for different waste streams should be adopted, and that solutions may depend on the scale of uses and the phase of programmes for using nuclear and radiological technologies.
9. RECOGNIZES the different national policies on spent fuel and radioactive waste management; that Member States may have centralised or distributed facilities for handling, storage and disposal. These activities may be provided through public or private organisations.
10. RECOGNIZES that in some cases, national solutions are neither readily available nor reasonably practicable. In this respect, services, facilities, and storage or disposal facilities shared between Member States could be considered as a viable alternative. Such sharing would need political decisions and societal acceptance as well as technical and legal solutions. The initiative for this kind of cooperation should, however, be taken by the Member States.
11. NOTES that the cooperation between the Member States today includes common research programmes, which are essential in developing waste management solutions and knowledge. Moreover, the pooling of technologies, services and knowledge would increase the number of potential waste management solutions both at national and supranational levels.

12. ACKNOWLEDGES the importance of research and training programmes at national and European levels for developing solutions and best practices as well as to maintaining expertise, skills and resources in the field of radioactive waste management from non-energy uses of nuclear and radiological technologies. The pooling of the training activities to increase the availability and scope of expertise and to share the best practices among all the Member States should be further supported.
13. NOTES that the Member States are responsible for maintaining and developing expertise, skills and resources relevant to their needs. The mapping of existing expertise, skills and resources is essential for planning and for responding to future needs. This should be carried out nationally and through European cooperation such as the European Human Resources Observatory.
14. NOTES the responsibility of the Member States and of the Community to include data on radioactive waste from non-energy uses of nuclear and radiological technologies in the reports on waste management at all levels.
