



Työ- ja elinkeinoministeriö
Arbets- och näringsministeriet

Summary of the national programme for the management of spent nuclear fuel and radioactive waste

Together with the Radiation and Nuclear Safety Authority, the Ministry of Economic Affairs and Employment and the Ministry of Social Affairs and Health have prepared a programme on the management of spent fuel and radioactive waste in Finland. The programme is a national programme required by Council Directive 2011/70/Euratom. The national programme now drawn up is the second of its kind. An environmental impact assessment of the programme was also carried out in connection with the preparation of the national programme. The national programme contains a summary of the most significant results of the environmental impact assessment.

The spent fuel and radioactive waste generated in Finland are mainly managed in Finland. The responsibility for the management of spent fuel and radioactive waste and its costs lies with the operator whose operations generate the waste. The Finnish State bears ultimate responsibility for the management of spent fuel and radioactive waste generated in Finland, and the state also separately prepares for the costs of waste management.

The management of nuclear fuel and radioactive waste used in Finland is implemented responsibly. However, the national programme can be developed in coming decades, for example by reforming legislation, taking into consideration cooperation between operators in license procedures and by further developing technical solutions related to waste management, waste accounting, and national expertise.

The reform of the Nuclear Energy Act has been found to be vital in various contexts. Reform is needed, for example, to the licensing system and the legislation of modular reactors and other future technologies. In connection with legislative amendments, the need to harmonise the procedures laid down in the Radiation Act and the Nuclear Energy Act will also be considered.

In the future, the management of spent fuel and radioactive waste should facilitate more effective cooperation between the sector's operators on market terms. Achieving this objective will require, for example, that licences held by existing nuclear facilities enable to a small extent the handling, storage and final disposal of waste not generated in their own activities.

A final disposal solution is being developed under the leadership of the Government for high-activity sealed radiation sources, which have been found to be challenging. In practice, the aim is to develop the final disposal solution by utilising existing or planned infrastructure. Preparations will also be made for the handling, storage and final disposal of radioactive waste resulting from unexpected events, such as accidents and damage, by utilising existing or planned infrastructure.

In the future, the aim is to also determine whether it would be possible to incinerate waste exempt from supervision in Finnish waste incineration plants. Incineration would reduce the amount of waste that ends up

in landfills and eliminate the need for derogations for the landfilling of organic waste. For the time being, waste incineration plants do not accept waste from nuclear power plants that is exempt from supervision. The introduced waste accounting database takes into account the information to be reported internationally, but national discussion on the information to be included in the database is still ongoing. The consolidation of procedures requires a more detailed definition of what data should be kept in the national database.

As a rule, each operator is responsible for maintaining the expertise related to the management of spent fuel and radioactive waste in the scope their activities require. As the tasks related to the management of spent fuel and radioactive waste in Finland will continue for decades, it is necessary to ensure at the national level that new experts can also be trained in the field to act as operators and authorities.