



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL FOR ENERGY

Directorate D - Nuclear energy, safety and ITER  
**D.3 – Radiation protection and nuclear safety**

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## Verification under the terms of Article 35 of the Euratom Treaty

### Main Conclusions

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# DENMARK

## Routine and Emergency radioactivity monitoring arrangements Monitoring of radioactivity in drinking water, food and feed samples

<b>Dates</b>	28 – 30 May 2024
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<b>Reference</b>	DK 24-03

## INTRODUCTION

Article 35 of the Euratom Treaty requires that each Member State shall establish facilities necessary to carry out continuous monitoring of levels of radioactivity in air, water, and soil and to ensure compliance with the basic safety standards<sup>1</sup>.

Article 35 also gives the European Commission (EC) the right of access to such facilities to verify their operation and efficiency. The Radiation Protection and Nuclear Safety Unit (ENER D.3) of the EC's Directorate-General for Energy (DG ENER) is responsible for undertaking these verifications.

The main purpose of verifications performed under the Article 35 of the Euratom Treaty is to provide an independent assessment of the adequacy of monitoring facilities for:

- liquid and airborne discharges of radioactivity into the environment from a site;
- levels of environmental radioactivity at the site's perimeter and in the marine, terrestrial and aquatic environment around the site, for all relevant pathways;
- levels of environmental radioactivity on the territory of the Member State.

A verification team from DG ENER visited Denmark from 28 to 30 May 2024 to verify:

- environmental radioactivity monitoring arrangements in Denmark, in routine and emergency situations;
- radioactivity monitoring in drinking water, in food and feed samples in Denmark;
- fixed and mobile monitoring facilities in Denmark;
- infrastructure, analytical methods, quality assurance and control aspects of the radioanalytical laboratories of the DTU Sustain located at the Risø campus and of the laboratories of the Radiation Protection Division of the Danish Health Authority, Copenhagen;
- reporting of environmental monitoring programme results.

This document gives an overview of the verification team's main conclusions on the environmental surveillance systems in place in Denmark and recommendations for their improvement. More detailed information concerning the verification is available in the technical report (TR) of the verification.

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<sup>1</sup> Council Directive 2013/59/Euratom of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom (OJ L 13 of 17.1.2014)

## MAIN CONCLUSIONS

The verification team successfully completed the verification planned for the visit. The information supplied by the Danish authorities in advance of the visit, as well as additional documentation received during and after the verification, was useful.

- (1) The verification activities performed demonstrated that the facilities necessary for the monitoring of levels of radioactivity in air, water and soil in Denmark are adequate. The Commission could verify the operation and efficiency of a representative part of these facilities.
- (2) The verification activities performed demonstrated that the facilities necessary for the monitoring of levels of radioactivity in air, water, and soil in Denmark in the event of a radiological emergency are adequate. The Commission could verify a representative part of these facilities.
- (3) The verification team wishes to make the following recommendations:

- a. In Denmark the information on monitoring of radioactivity is not available to the public on regular base. The monitoring results were previously published on the DTU Sustain website. However, since this website is currently under reconstruction, the results of national radioactivity monitoring programme are not accessible to the public.

*The verification team recommends making the environmental monitoring results available for the public.*

- b. Danish Emergency Management Authority operates the network of environmental radiation dose rate monitoring stations. The dose rate data is sent to the European Union Radiation Data Exchange Platform (EURDEP), but it is not available on any other public website in Denmark.

*The verification team recommends making the on-line dose rate monitoring data available for the public. Currently the public can access these data only on the EURDEP platform through a link provided on the DEMA website.*

- (4) These remarks aside, the verification team nevertheless concludes that the verified parts of the monitoring facilities and the monitoring system for environmental radioactivity in Denmark are conform to the provisions laid down under the Article 35 of the Euratom Treaty.
- (5) The detailed verification findings are compiled in the 'Technical Report' that is addressed to the Danish competent authorities through the Permanent Representation of Denmark to the European Union.
- (6) The Commission services kindly request that the Danish authorities submit, by 28 February 2026, a report on implementation of the recommendations, as well as on any significant changes in the set-up of the monitoring systems. The Commission will take this report into account when considering whether a follow-up verification would be necessary in Denmark.
- (7) Finally, the verification team acknowledges the excellent co-operation it received from all persons involved in the activities it performed.

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