



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR ENERGY

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

Verification under the terms of Article 35 of the Euratom Treaty

Main Conclusions

SLOVENIA

Ljubljana

Routine and emergency radioactivity monitoring arrangements Monitoring of radioactivity in drinking water and foodstuffs

Dates

6-7 June 2022

Verification team

Ms Elena Luminita DIACONU, DG ENER

Ms. Faidra TZIKA, DG ENER

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INTRODUCTION

Article 35 of the Euratom Treaty requires that each Member State shall establish facilities necessary to carry out continuous monitoring of the levels of radioactivity in air, water and soil and to ensure compliance with the basic safety standards¹.

Article 35 also gives the European Commission (EC) the right of access to such facilities in order that it may 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 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 Slovenia on 6-7 June 2022 to review:

- Facilities for routine monitoring of environmental radioactivity in Ljubljana;
- Facilities for emergency monitoring of environmental radioactivity in Ljubljana;
- Measuring laboratories, in particular infrastructure, analytical methods, quality assurance and control aspects;
- Reporting of the environmental monitoring programme results.

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

MAIN CONCLUSIONS

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

- (1) The verification activities that were performed demonstrated that the facilities necessary for the monitoring of levels of radioactivity in air, water and soil in Ljubljana are adequate. The Commission could verify the operation and efficiency of a representative part of these facilities.
- (2) The verification activities that were performed demonstrated that the facilities necessary for the monitoring of levels of radioactivity in air, water and soil in Ljubljana in the event of a radiological emergency are adequate. The Commission could verify the availability of a representative part of these facilities.

¹ 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)

(3) The verification team wishes to make the following recommendations:

- The verification team noted that at the Institute for Occupational Safety (IOS) there are no arrangements for managing contaminated samples in emergency, when the number of environmental samples may increase, and the samples may have considerably higher levels of activity than in a routine situation. The verification team was informed that emergency procedures already exist, and the documents will be revised (TR, section 7.2.1 General).

The verification team recommends, that the IOS includes in the revised emergency procedures a plan for management of samples in an emergency, taking into account the increased number of incoming environmental samples with radioactive contamination.

- The verification team reviewed the environmental radioactivity monitoring programme in the Ljubljana region, including the sampling and measurement frequencies. The team noted that surface water is sampled and measured twice a year while mixed diet is sampled and measured once a year (TR, section 7.4.1 Sampling programme).

The verification team recommends increasing the frequency of sampling/measurements for surface water and mixed diet in line with the minimum quarterly recommended periodicity as per Commission recommendation 2000/473/Euratom.

- (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 Ljubljana 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 Slovenian competent authority through the Permanent Representation of Slovenia to the European Union.
- (6) The Commission services kindly request that the Slovenian authorities submit, before the end of 2024, a progress report on their 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.
- (7) Finally, the verification team acknowledges the good co-operation it received from all persons involved in the activities it performed.

E.L. Diaconu

Team Leader