



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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# PORTUGAL

## Lisbon

### Routine and emergency radioactivity monitoring arrangements

### Monitoring of radioactivity in drinking water and foodstuffs

**Dates** 3-5 December 2018

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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 standards<sup>1</sup>.

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 by a site;
- Levels of environmental radioactivity at the site 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.

For the purpose of such a review, a verification team from DG ENER visited Lisbon on 3 – 5 December 2018. This mission dealt with

- Facilities for routine monitoring of environmental radioactivity in Lisbon;
- Facilities for emergency monitoring of environmental radioactivity in Lisbon;
- Measuring laboratories, in particular infrastructure, analytical methods, quality assurance and control aspects, as well as reporting.

The present document gives an overview of the main conclusions by the verification team concerning relevant aspects of the environmental surveillance and corresponding recommendations. More detailed information concerning the verification is available in the technical report (TR) of the verification.

## MAIN CONCLUSIONS

All verifications that had been planned by the verification team were completed successfully. The information supplied by Portuguese 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 to carry out monitoring of levels of radioactivity in air, water and soil in Lisbon 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 to carry out monitoring of levels of radioactivity in air, water and soil in Lisbon in the event of a radiological emergency are adequate. The Commission could verify the availability of a representative part of these facilities.

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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)

- (3) Two recommendations are formulated, in particular the following:
  - The verification team recommends that the radiological laboratories of the Instituto Superior Tecnico (IST) (section 6.2.1 of the TR) be equipped with a modern Laboratory Information Management System (LIMS).
  - The verification team recommends modernisation of the IST gross alpha/beta counting equipment.
- (4) Notwithstanding these remarks the verified parts of the environment monitoring facilities and the monitoring system for environmental radioactivity in Lisbon conform to the provisions laid down under the Article 35 of the Euratom Treaty.
- (5) The detailed verification findings and ensuing suggestions are noted in the 'Technical Report' that is addressed to the Portuguese competent authorities through the Permanent Representation of Portugal to the European Union.
- (6) The Commission services kindly request that the Portuguese authorities submit, before the end of 2020, a report on the implementation of the recommendations by the Portuguese authorities, and about any significant changes in the set-up of the monitoring systems. Based on this report the Commission will consider the need for a follow-up verification.
- (7) Finally, the verification team acknowledges the excellent support it received from everybody involved in the activities it performed.

V. Tanner

Team Leader