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Directorate D - Nuclear Energy, Safety and ITER
D.3 – Radiation Protection and Nuclear Safety

Main Conclusions of the Commission's Article 35 verification

MALTA

National monitoring network for environmental radioactivity

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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⁽¹⁾.

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 (and control thereof);
- 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 Malta from 15 to 16 March 2016. This mission dealt with

- Control of the implementation of the recommendations of the Commission made in 2009;
- Environmental radiological monitoring programme and activities as implemented in the visited regions of Malta, including sampling and monitoring systems, analytical methods, quality assurance and control aspects, reporting, etc.;
- 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 the Maltese 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 continuous monitoring of discharges of radioactivity in the air, water and soil in Malta are adequate. The Commission services could verify the operation and efficiency of a representative part of these facilities.

¹ Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation (OJ L-159 of 29/06/1996) which will be superseded by 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, p. 1).

- (2) Most of the recommendations issued by the Commission in 2009 have been followed and implemented to a satisfactory degree (Section 8.2 of the TR), but there still remain a few items where the 2009 recommendations cannot be considered as fully implemented. The Commission requests the Maltese authorities to implement the remaining recommendations of 2009 without delay.
- (3) The following recommendations and suggestions are formulated:
- a. Concerning the overall monitoring programme (Section 8.1 of the TR), the verification team recommends that the Radiation Protection Board (RPB) investigates methods for making the on-line radiation dose rate data available to the public in Malta via its own website. Furthermore, the team recommends that the RPB investigates methods to make information on routine environmental radioactivity monitoring programme results more accessible to the general public via an annual report or on-line reporting.
 - b. Concerning monitoring of ambient gamma dose rate (Section 8.3 of the TR), the verification team recommends that the RPB investigates the reasons for the interruptions in the EURDEP data transfers and takes corrective action to ensure reliability of the data exchange.
 - c. Concerning monitoring of radioactivity in drinking water (Section 8.5 of the TR), the verification team notes that the RPB needs to ensure the drinking water sampling frequency in Malta complies with the requirements of the Annex II of the Directive 2013/51/Euratom.
 - d. Concerning the Public Health Laboratory (PHL) radioanalytical measurements (Section 8.6 of the TR), the verification team recommends reducing the number of outsourced measurements and developing in-house radioactivity measurement capacity in the laboratory instead. Furthermore, the team recommends that the PHL follows the long-term trend of the HPGe-detector (located at the St Luke's hospital) energy and resolution stability. It also suggests allocating funds to acquire a new high-resolution gamma spectroscopy system as soon as possible.
 - e. Concerning the RPB emergency monitoring arrangements (Section 8.7 of the TR), the verification team recommends acquisition of additional hand-held dose rate meters, one portable air sampler and one mobile HPGe gamma spectroscopy system for emergency monitoring purposes. The staff of the RPB and PHL should have sufficient training to use the equipment. Additionally, it is recommended that the RPB includes monitoring of gaseous and particulate ^{131}I activity in air in the emergency monitoring arrangements.

These recommendations aim at maintaining adequate monitoring quality level on both routine and emergency conditions in Malta. Notwithstanding these recommendations the verified parts of the national monitoring system for environmental radioactivity in Malta are in conformity with the provisions laid down under Article 35 of the Euratom Treaty.

- (4) The detailed verification findings and ensuing recommendations are compiled in the 'Technical Report' that is addressed to the Maltese competent authorities through the Malta Permanent Representation to the European Union.
- (5) The Commission services request a report on the implementation of the recommendations by the Maltese authorities, in particular on the corrective actions implemented to ensure compliance with the legal obligation mentioned in point 8.5 of the TR with regard to the drinking water sampling frequency, and about any significant changes in the set-up of the monitoring systems

before the end of 2017. Based on this report the Commission will consider the need for follow-up verification in Malta.

- (6) Finally, the verification team acknowledges the excellent co-operation it received from all persons involved in the activities it performed.

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