Department of Radiological Protection and Nuclear Safety



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C. Oliveira

The main activities developed in 2005, in the Department of Radiological Protection and Nuclear Safety are organized in order to comply with the national and international duties attributed to ITN, to perform services to the community, research and teaching activities, and to answer the technical and scientific solicitations in the radiological protection field. Participation in international and national commissions continues to have a significant importance in the Department activities.

At National level the multi-institutions project-MinUrar has been completed by the end of 2005. At international level, the EUROTRANS- Design and study of the technical feasibility of ADS for the transmutation of radioactive waste -must be referred as one of the 6th Framework Programme projects started at ITN in 2005.

The LMRI- Lab. Metrology of Ionizing Radiations participates in an international process leading to the mutual recognition of national measurements standards of calibration and measurement certificates issued by the national metrology laboratories that is still being implemented among the Metre Convention Member States. The LMRI Calibration and Measurements Capabilities were published in the BIPM database.

Activities concerning the environmental radioactivity monitoring are centralized in the Radiological Environmental Monitoring Programme. Efforts to fit the recommendations of the EU's verification mission to comply with Article 35 of Euratom Treaty pursued including the implementation of an environmental database.

At the beginning of the year, a Measurement Unit was created. Main efforts were the adoption of measures to implement the ISO/IEC 17025 requirements including the introduction of a modern Laboratory Information Management System. All these efforts are part of the coordinate action for laboratory accreditation.

Also to comply with Article 35, a gamma monitoring network to measure radiation due to abnormal discharges in the environment and new monitoring equipment to more efficiently monitoring the radioactive liquid discharges of the campus into the public sewer have been installed.

During this year, the Central Dose Registry, complying with activities attributed by law to ITN, started the process for the collection of dose data measured and reported by the dosimetry companies operating in Portugal.

Reports for the General Directorate for Health to issue licences have been assured by DPRSN within the framework of the safety assessment activities of the Department.

Establishment of the infrastructure and installation support services for the Radionuclide Particulate Station belonging to the International Monitoring System at S. Miguel (Açores Islands), in the framework of the CTBT (Comprehensive Nuclear Test Ban-Treaty) has started during last year.

The DPRSN has been involved in the promotion and implementation of a radiation protection structure within the ITN *Campus* according to the international recommendations.

Education and training courses for professional workers are being provided. In order to fulfil a lack in Radiological Protection education at University level, a Master Course on Safety and Radiation Protection starting from an initiative of DPRSN and in collaboration with the Lisbon Technical University (IST) is in progress. Students from DPRSN participate in this Master. There is also a collaboration of DPRSN with FCL/Chemistry/ITN on the Master Course Biomedical Inorganic Chemistry. DPRSN' staff is also a regular collaborator on several Courses organized by the University and Health Technical Schools.

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