

Department of Radiological Protection and Nuclear Safety

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The main activities of the Department of Radiological Protection and Nuclear Safety (DPRSN) are four-folded: i) research and development ii) technical services iii) education and training and iv) participation in national and international technical and scientific committees.

The DPRSN staff involved in environmental radioactivity measurements and in nuclear analytical techniques and methods participated in intercomparison exercises organized by the European Commission (EC), by the International Atomic Energy Agency (IAEA) and by Spanish institutions.

The scarcity of human resources (researchers, technicians and research fellows) required to meet the increasingly higher volume of work resulting from the legal obligations and service providing duties as well as from the involvement in research and development projects, is presently seriously limiting and hampering the intervention capacity of the DPRSN.

Research and Development activities:

During 2007, special emphasis has been devoted to i) fostering and establishing partnerships between groups of DPRSN researchers and experts in other sectors of ITN and in other Portuguese and foreign institutions and to ii) the participation of DPRSN researchers in national and international consortia conducting R&D activities and projects funded by the European Union (ongoing in the E.U. 6th Framework Programme or being prepared for submission in the E.U. 7th Framework Programme), and by the Portuguese Foundation for Science and Technology (FCT), among others. Considering the trends in Radiation Protection and Radiation Dosimetry, as well as the DPRSN mission and competences, first steps have been taken to strengthen and boost the involvement of DPRSN and its researchers in areas such as the Medical Applications of Radiations and in Computational Dosimetry. The activities in Radiobiology and associated topics received due attention.

Technical Services:

The DPRSN conducted, through its Environmental Radioactivity and Measurement Units, the National Environmental Radiological Survey (2007), having extended it, compared to the 2006 environmental monitoring programme, to include the monitoring of the areas around the former uranium mining sites and

of the campus of Sacavém.

The Radiological Protection and Radioactive Waste Management Unit performed activities associated to the licensing of radioactive sealed sources, the interim storage of radioactive waste, the detection of radioactive substances in scrap metal, the management of radioactive wastes on medical, and industrial facilities, and the verification of the radiological safety of installations, among others.

The Radiological Risk Assessment Unit pursued its technical activities related to the assessment of the safety of radiological installations, mainly in Nuclear Medicine installations, Radiotherapy vaults and cyclotron units in hospitals and clinics throughout the country.

The Dose Assessment and Dose Registry Unit has strengthened its dosimetry- monitoring- and occupational exposure-related activities through participation in international (European) studies and projects, namely in the framework of the activities of EURADOS (European Radiation Dosimetry Group).

Education and Training:

DPRSN researchers participated in training courses in Radiological Protection for professionals in the medical and industrial sectors and taught several disciplines in post-graduation Courses in Radiological Protection and Safety in several Portuguese universities.

A significant increase was observed during 2007 in the number of final year students undertaking their graduation thesis in the framework of the activities of the different units of the DPRSN. The number of Master thesis and post-graduation works, by DPRSN fellows and/or under the supervision of DPRSN researchers, kept increasing at a consistent pace.

DPRSN participated in the activities of the European platforms and networks in education and training in Radiological Protection, namely in EUTERP and CHERNE.

Participation in national and international technical and scientific committees:

DPRSN researchers act as representatives of Portugal and assisted national delegates to international Committees, Working Groups and Task Forces whose activities are organized under the auspices of the E.U., the IAEA, and the Organization for Economic Cooperation and Development (OECD).

DPRSN Staff

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