

# Department of Radiological Protection and Nuclear Safety

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Main lines of the 2004 activities of Department of Radiological Protection and Nuclear Safety (DPRSN) were quality and its integration in ITN.

Quality, in wide sense, was a concern in every annual planning of DPRSN activities, but in 2004 it became a priority. Quality in laboratories, technical services and in management, with or without the objective of fulfilment of requirements of accreditation or certification, is a driving force in the quality improvement and is seen from the outside as a guarantee of confidence and a symbol of prestige.

The LMRI – laboratory for metrology of ionizing radiation – have settled a Quality System in 2002. These QS was audited and recognized at European and world level (Euromet and Mutual Recognition Agreement), and form a pole of knowledge and experience with a potential to be used as trigger to the establishment and development of quality procedures by others groups in DPRSN.

In the report of the Department operational units – on next pages - are included detailed references to initiatives that were carried out during 2004 to initiate the implementation of quality systems in several fields: gamma spectrometry laboratory, environmental radioactivity and individual monitoring of external doses. Accreditation is the final objective of some of these activities: global alpha, global beta, tritium techniques and individual monitoring of external doses.

The report made by the EU Mission of Verification on the Compliance with Article 35 of Euratom Treaty that took place in 2002 as well as the concurrence with other suppliers of water analysis, contributed strongly to speed up the implementation of quality systems in the field of environmental radioactivity.

The other main line of DPRSN activities was to deepen its integration in ITN. In 1998 DPRSN was transferred from General Directorate of Environment to ITN, but that administrative decision has not been followed by an integration program. In consequence the Department was kept apart and this did not allow it to benefit with inter departmental cooperation. This cooperation would

be the source of a renewed impulse to scientific research activities. Several initiatives were undertaken, stimulated or supported, whose success or failure can be evaluated only in the future.

The Department organic structure was revised in 2004 and some changes were adopted. In the new structure two groups were raised: Operational Units and Research Projects.

To the Operational Units - Radiological Risk and Safety Assessment, Environmental Radioactivity, Dose Assessment and Dose Registry, Radiological Protection and Radioactive Waste Management and Measurement of Radioactivity and Ionizing Radiation – were assigned staff, infrastructure and the responsibility for the technical services to be carried out by ITN to inside or outside customers. The approved research projects were run under the responsibility of a researcher in a more autonomic way.

Among the research projects carried out in 2004, can be pointed out the MinUrar project (multi-institution project on the effects on health and on environment of the past uranium mine operations), and Eurados project (Harmonization of Individual Monitoring in Europe).

DPRSN has continued to carry out national regulatory activities attributed by law to ITN: control of radioactive sealed sources, authorisation of transport of radioactive materials by road and rail as well as the establishment and keeping of a data base of individual monitoring.

Technical services were carried out to public and private enterprises as described in the report with relevance to the safety and protection of the public. Unfortunately the reduction of Department staff is affecting negatively this type of activities.

Participation in international and national commissions mobilized a significative percentage of available manpower of DPRSN staff, mainly in EU activities.

Contract of new and younger staff is essential to the Department to fulfil their attributions and to keep up the scientific progress in the field of radiation protection and nuclear safety.

# Structure of the Sector and Technical staff

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## Research groups in the Reactor sector

- Dose Assessment and Dose Registry
- Environmental Radioactivity
- Metrology of Ionizing Radiation and Radioactivity Measurements
- Radiological Protection and Radioactive Waste Management
- Radiological Risk and Safety Assessment

## Administrative and Technical staff

- A. M. ROSA
- D. M. ALVES
- J. MONTEIRO
- M. E. PACHECO
- V. CORDEIRO, driver