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TITLE: Occupational Radiological Protection Control through Inspection done by Qualified Experts for licensing procedures in Austria

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For the last thirty years, the radiation protection expert group of the Austrian research centers Seibersdorf has been contributing with its expertise to achieve ALARA for occupational exposure in the different fields of the use of ionizing radiation, such as

- a) X-ray equipment in medical and industrial applications
- b) Application of sealed sources in different fields (medicine, radiographers, industry)
- c) Use of radionuclides and unsealed sources in specialized laboratories.

This expertise includes justification, optimization and dose limitation for the different practices, the setting of dose constraints, and the limitation of dose for exposed workers and members of the public. In addition it consists of the estimation of the effective dose and the measurement and monitoring of the different workplaces for the requirements for controlled and supervised areas and the restriction of exposure.

On the basis of the legislative acts in Austria and the European Community the measurements and the controlling activities of the radiation protection expert group in the different above mentioned fields are explained and the methods of measurement during this long period are described. Also the important role of the quality assurance for the accreditation and the different measurements especially in the medical field is also discussed. As a summing up, the way of the controlling function of the group in the implementation of the regulations is clearly stated.

Results are given for the three fields mentioned above with special emphasis on the ALARA principles used in the assessments.