

# EURADOS

# EURADOS WG2: 25 YEARS OF NETWORKING TO FOSTER HARMONISATION IN INDIVIDUAL MONITORING FOR EXTERNAL RADIATION

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The European Radiation Dosimetry Group (EURADOS) is a non-profit association of about 80 European institutions collaborating for scientific understanding of the dosimetry of ionising radiation. Created 25 years ago, the specific working group 2 (WG2) has been dedicated to fostering harmonization in individual monitoring for external exposure.

Over the years, WG2 has set activities to improve quality and reliability in individual monitoring, including the organization of intercomparison exercises of personal dosemeters, the enhancement of personnel skills thanks to training, and the sharing of best practices through publishing recommendations, developing research actions, networking, and dissemination.

#### Training Courses (TC) The general purpose is the implementation of the European Commission Technical Recommendations for Monitoring Individuals Occupationally Exposed to External Radiation (Radiation Protection 160, RP160 [3]). All aspects of individual monitoring as discussed in RP160 are addressed during the courses with an emphasis on Network of ~40 members metrology, quality assurance and type testing. Recent developments participating actively 0 0 📟 🛛 🕯 🛛 🕯 are also covered, including the changes coming with the latest version of ISO/IEC 17025:2017, impact of the EU Directive 2013/59/Euratom and the EU General Data Protection Regulation (GDPR). Intercomparison (IC) exercises Intended audience: all stakeholders in individual monitoring for external One of the key actions of WG2 activities consists in the organization of radiation, but in particular junior or trainee managers of approved regular and self-sustained intercomparison exercises for Individual dosimetry services. Monitoring Services [1] [2]. Topics covered: General radiation protection, basic detection principles, This action provides to the Individual Monitoring Services (IMSs) a measurement methods, dosimetry quantities, uncertainty evaluation, method to show compliance with the ISO/IEC 17025 requirements, as calibration and type-testing, inter-comparisons, quality assurance, accreditation in conformity to this standard is becoming more and quality control, dose registration, accreditation, QA audits. more important in Europe. ~200 observers Learning Network Learning network is intended to share and discuss about 'hot' topics faced within the community. These events are organized by WG2 at the Participants' M EURADOS annual meeting. WG2 asks the IMS community to choose 2 or Belgrade 2022/06 3 topics to be discussed in this Learning Network per event. Such open discussions are essential to let participants share their experience and Recommendations to solve data and IT raise some topics that could feed into the WG2 action plan. problems that IMSs may face such as for instance data management, data security, data storage, GDPR right to be forgotten Elaboration of recommendations issues, etc. Some broad recommendations were/are being elaborated to address different problems shared by IMSs.

**Recommendations** to assist and encourage IMSs to apply for accreditation according to the ISO/IEC 17025 standard [4]

## Dissemination

A significant part of the WG2 actions is dedicated to dissemination through webinars, presentations at various scientific meetings or conferences, or via the publication of its activity in the open literature or through EURADOS Reports.

WG2 also benefits from collaboration between EURADOS and the International Organization of Standardisation (ISO). A practical example of a common action between these two networks is illustrated by a survey, currently in progress, aiming at giving an up-to-date overview of routine practices of IMSs.

Surveys

## **Research** action

One specific research action intends to address the high variability of the intrinsic background and sensitivity of PADC (CR-39) material, by involving CR-39 suppliers and IMSs in these research studies. The final aim is to improve and harmonize neutron dosimetry performed with solid-state nuclear track detectors (SSNTDs) based on this material.

### REFERENCES

# MEMBRE DE ETSOF

Recommendations to help defining

what training IMS staff should have.

[1] EURADOS Report 2021-05, A.F. McWhan, et al: EURADOS Intercomparison 2019 for Extremity and Eye Lens Dosemeters - Summary of Procedures, Results and Conclusions (2021) [2] EURADOS Report 2021-06, S. Mayer, et al: EURADOS Intercomparison IC2017n for Neutron Dosemeters (2021)

[3] European Commission Technical Recommendations for Monitoring Individuals Occupationally Exposed to External Radiation, Radiation Protection 160

[4] EURADOS Report 2020-02, B. Petrovic, et al: ISO/IEC 17025 Guidance for IMS: Suggestions on How to Interpret and Implement the Requirements Including Examples from Accredited Laboratories (2020)