

Poster presentations

Introductions



Legislative framework and E&T



Spanish course for the Radiation Protection Experts (RPE). A new approach in the methodology.

Cristina Llorente, CIEMAT, Spain





- ENETRAP II set up the "European radiation protection training scheme" (ERPTS) for the RPE in convergence with the definition given in the BBS. CIEMAT has been involved since the beginning.
- RPE in Spain is currently defined in The National Regulatory Body (CSN) guidance IS-03. In this document is established the requirements to get the qualification to be recognized as a RPE. The applicant must have a university degree (level 6 EQF), approved a 300-hour training course, 3 years experienced in the RP field and finally overcome the aptitude exams of the CSN. Since the eighties, CIEMAT traditionally delivers this training course as part of its main E&T activities.
- In the special context of CIEMAT, as part of ENETRAP & as experienced provider of training for RPEs, a new proposal of the RPE course has been done, adapted to the new European situation, satisfying the CSN requirements and integrating the new pedagogical methodologies in a blended learning format.



Impact of new BSS directive on radiation protection training and education in Slovenia

Matjaž Koželj*, Helena Janžekovič** *Jožef Stefan Institute, Slovenia, **Slovenian Nuclear Safety Administration, Slovenia





- Implementation of Directive requires changes in at least 20 legal documents.
- Currently, 17 different categories of training courses are defined for exposed workers, training through authorised organisations;
 - No bigger changes are foreseen.
- Radiation protection experts: definition and roles are already in accordance with Directive, but:
 - Training and education are not formally arranged;
 - Only general requirements for recognition are given.
- Radiation protection officers: in national legislation defined as person responsible for RP and RP unit staff member:
 - Persons responsible for RP should be more practically oriented (and skilled);
 - Training should be adequately changed.



E&T in the New BBS Directive (2013/59/EURATOM) and the Portuguese Legal Framework

António N. Falcão¹, Maria M. Meruje¹, Pedro Rosário²

¹Department of Nuclear Science and Engineering, Instituto Superior Técnico, Lisbon University, Portugal ²Directorate-General of Health, Portugal





- The Portuguese legislative framework and the transposition of the new BSS summarized in a SWOT analysis. Topics addressed:
 - Education, training and recognition of RPEs
 - Education, training and recognition of RPOs
 - Competent authority, training, training providers
 - Certificate, equivalence and renewal
 - Relation with the undertaking and enforcement
 - Update on the estimated qualified personnel needs



E&T on radiation protection and related domains



Training in radiation protection at NRG

Heleen van Elsäcker-Degenaar Nuclear Research and consultancy Group (NRG) The Netherlands





- Target group
 - RW: medical doctors, dentists, operators in the field of Exploration and Production, operators in nuclear (reactor and hotlab)
- □ Acknowledged courses for RW, RPO and RPE
- □ Other courses for RW, RPO and RPE
 - Basic information
 - Life-long-learning
- Other courses
 - Nuclear



Radiation protection training by the SCK•CEN Academy for Nuclear Science and Technology

Michèle Coeck

Belgian Nuclear Research Centre SCK•CEN, Belgium





□ SCK•CEN Academy for Nuclear Science and Technology

Guidance for young researchers

- Guidance with thesis work (Bachelor-Master-PhD level), technical visits for students and pupils, guidance for teachers
- Contributions to and organization of courses
 - Academic learning
 - Customized training for professionals

Policy support in E&T matters



Cooperation in education and training In Nuclear Chemistry (CINCH-II)

Claudia Morariu Institute for Radioecology and Radiation protection (IRS), Leibniz University Hanover, Germany





The CINCH-II project

The CINCH-II project is aiming at the European co-ordination of education in nuclear chemistry. 3 fully remote-controlled experiments for educational purposes are being developed at the IRS.

GammaLab

- practical experience in gamma-spectrometry of real samples
- learning the importance of characteristic limits

AutodepositionLab

- introduction of the approach of producing thin-layered solid samples for a reliable detection
- teaching the basics of electrochemistry by using metals of different nobility

🖵 lonLab

- separation of radionuclides using ion exchangers
- fundamentals in theoretical, as well as practical chromatography





Collaboration between institutions in Lituania for emergency preparedness training

Ieva Gatelyte Radiation Protection Centre, Lithuania





The quality of the emergency preparedness depends on many factors and one of the most important is a **periodical practical training of the first responders** and those who might be related to the emergency situation (emergency workers). The organization of the emergency preparedness training in Lithuania is stated on the **Law on Civil Protection** of the Republic of Lithuania and on the **Law on Radiation Protection** of the Republic of Lithuania. According to the **State Residents Protection Plan in Case of Nuclear Accident** the staff of the state and municipality institutions, other establishments and economic entities, **must participate at the civil protection training**, determined by Fire and Rescue Department.

Regarding to the **State Level Civil Protection Training Plan for 2012 – 2014** in 2013 October the Radiation Protection Centre organized the **state level civil protection functional training** on radiation accident caused by "dirty bomb". Many institutions participated in this training: Vilnius International **Airport**, Lithuanian Police **Anti-terrorist** Operations Unit "Aras", **Fire and Rescue Department** under the Ministry of the Interior Authority, **Police** Department under the Ministry of the Interior, Vilnius city **municipality**, State Enterprise Radioactive **Waste** Management Agency, the **Environmental** Protection Agency, State **Nuclear** Power Safety Inspectorate and the others. The institutions, which participated in the training, agreed, that such kind of practice helps to evaluate emergency preparedness and to reveal the **advantages** and **disadvantages** of separate institutions.

Radiation Protection Centre also cooperates with other institutions as State **Border** Police, Fire and Rescue Department, Police Department, **First Aid** in order to organize the **periodical training** for first responders according approved schedule.



Communicating radiation protection issues



EAGLE: For an improved coordination of citizen-centered communication on ionizing radiation risks

Metka Kralj, ARAO, Slovenia Tanja Perko and Catrinel Turcanu, SCK•CEN, Belgium Claire Mays, Institute SYMLOG de France, France Metka Kralj, ARAO, Slovenia Daniela Diaconu, Institute for Nuclear Research Piteşti, Romania Nadja Zeleznik, REC Country Office Ljubljana, Slovenia





- Education, training and information to the public are key factors in the governance of ionizing radiation risks, as are opportunities for dialogue and stakeholder involvement in decision making. EAGLE is engaging stakeholders in assessing the current dissemination of ionizing radiation information to the public and providing practical guidance tools for good practice to support the ideal of a participative, citizen-centred communication.
- Main messages from EAGLE research: stakeholders require to be treated as competent partners in dialogues about radiation risks, experts are more credible transmitters of information about radiation risks but need additional communication training, focus should be switched from nuclear energy risks to actual everyday radiation risks that are relevant for the public.



Elevated indoor radon concentrations:

Risks and safety measures as presented by mass media in Slovenia

Metka Kralj and Irena Daris, ARAO, Slovenia Nadja Železnik, REC, Country office Ljubljana, Slovenia Claire Mays, Institute SYMLOG de France, France Tanja Perko, SCK•CEN, Belgium





- National Dialogue Group (journalists, governmental administration, nuclear professionals) working in the context of EU project EAGLE analyzed mass media reporting about indoor radon concentrations in schools and kindergartens.
- Main features of mass media reports: sensationalistic reporting style, lack of reference data, inadequate reference data. Required safety measures were reported more realistically although not in proportion with presented risks.
- Recommendations: governmental administration bodies should be accountable for information about natural background radiation and proactive in providing information, all stakeholders need training in communication skills.