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ENETRAP

European Network on Education and Training in Radiological Protection

M. Coeck, C. Etard, S. Moebius, A. Schmitt-Hannig, A. Luciani, J. van der Steen, M. Marco, J. Stewart, J. Balosso, R. Thompson

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- Why this network?
- What is the content of the project?
  - Aims
  - How to be achieved
- Future

Why?

Facts

- Decreasing number of experts in radiation protection (as is the case with all nuclear expertise)
- Need to ensure protection of workers, public and environment remains
- Necessity to maintain a high level of expertise in field of RP

Need

- Infrastructure for sustainable education and training
  - to combat the decline in expertise and
  - to assure high level of RP knowledge in the future

More specific “driving force”

On A European Level

- **Council Directive 96/29/EURATOM**
  Laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radioation
  98/C 133/03
  Communication from the Commission concerning the implementation of Council Directive 96/29/EURATOM
- Many EU member states already provide E&T program, based on European Directive Basic Safety Standards and the definition of “qualified expert”
- Wide variety of national approaches for E&T of qualified experts exists in EU member states

More specific “driving force”

On A European Level

- Development of COMMON radiation protection and safety culture
  - *Mutual recognition of acquired competences of radiation protection expert*
  - *Mutual recognition of RP courses*
  - *Will favor mobility of workers, teachers and students*

Is there an interest?

Previous Survey In 2002

- Survey on the situation of RPEs in the Member and Applicant States of the EU
  Covered qualification aspects of RPEs, including current definitions and other regulatory provisions and requirements, legal status, pre-educational requirements, duration of the E&T programme

Outcome

- *Significant differences in the legislative approach to the issue of RPEs within EU*
- *A wide variety of systems for the underpinning E&T*
- *Considerable interest among Member States for better harmonisation of E&T requirements in the different areas of radiation protection*

Is there an interest?

Feasability Study

- Intension: to explore the possibilities of establishing a European Platform on E&T in RP which could pre-eminently play a role in reaching consensus about an internationally agreed system of recognition of RPE's

Outcome

- *All countries have developed their own education system over a long period of time*
- *Impossible to strive to uniformity*
- *Instead, harmonisation should be reached by evolution of internationally agreed common minimum criteria for the qualifications of the RPE*
- *Wide interest in the EU Member and Applicant States to participate in such a Platform*

ENETRAP project

- Motivation to start with a European project perform preparatory study and collect input for a European E&T platform
- 10 partners
- Start April 2005
- 24 months
- www.sckcen.be/enetrap

Partners

- SCK-CEN, Belgian Nuclear Research Center, Belgium
- INSTN, Institute for Nuclear Sciences and Technology, France
- FZK-FTU, Center for Advanced Technological and Environmental Training, Germany
- BfS, Federal office for RP, Germany
- ENEA, Italian National Agency for New Technology, Energy and Environment, Italy
- NRG, Nuclear Research and consultanty Group, The Netherlands
- CIEMAT, Research Center for Energy, Environment and Technology, Spain
- HPA-RPD, Health Protection Agency, UK
- UJF, University Joseph Fourier, France
- NHC, North Highland College, Scotland

Main objectives

- To develop a more harmonized approaches for E&T in RP in Europe and its implementation
- To better integrate existing E&T activities in the RP infrastructure of the European countries; integrate national resources and capacities (in order to combat the decline in both student numbers and teaching institutions)
- To provide the necessary competence and expertise for the continued safe use of radiation in industry, medicine and research

ENETRAP will reach the objectives by

- Assessing training needs and capabilities
- Identifying the potential users and their future involvement (the sustainability of the network)
- Reviewing the scientific contents of present E&T activities
- Explore the effectiveness of on-the-job training and identify options for additional programs
- *Survey by questionnaire sent out to 25 European countries and candidate states (15 already received)*

ENETRAP will reach the objectives by

- Proposing recommendations for the recognition of courses and competencies of radiation protection experts
- Making recommendations for revising the current European Radiation Protection Course (ERPC) include a system for credit points and modern educational tools, such as distance learning
- Launching a consortium of universities with the aim of creating an European Master in Radiation Protection

Two important characteristics

- "Bottom-up" approach instead of the more usual "top-down"
- The decision for developing a modular structure, as well for the Education as for the Training programs

Already existing initiatives

Education

Many courses provided by universities

Project for European Master in Nuclear Technology in Grenoble

Courses in projects like CETRAD, EURAC, …

But these are not included in general framework at European level, or no modular structure, or focussed on very specific fields, …

Nevertheless

- learn from their experiences;
- already existing collaborations between universities, can be used when setting up the EMRP

Already existing initiatives

Training

ERPC European Radiation Protection Course for Qualified Experts (INSTN, Saclay)

In English; Modular (4); Lectures, Pratical works, Exercises and visits; Based on EC communication on implementation of the European Basic Safety Standards and IAEA Standard syllabus

European participants are underrepresented

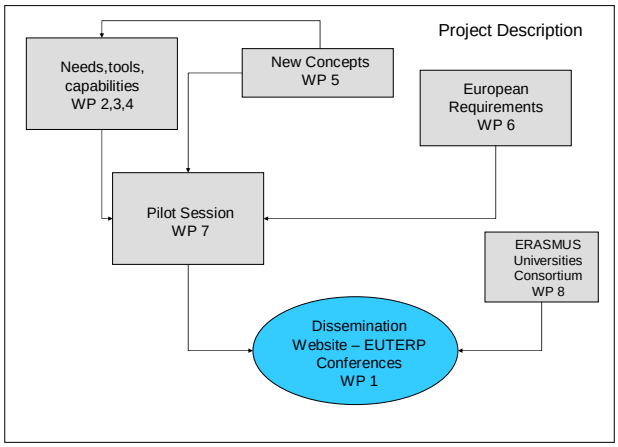
Think about barriers:
lack of recognition of national competent authorities
total cost for participants and employers, time,…

Implement revision, make course more flexible so that it meets individual students and employers needs, using modern education tools

Work packages

- WP1 Implementation and co-ordination of ENETRAP
- WP2 Assessing the training needs and capabilities within the EU, the New and the Candidate Member States
- WP3 Recognition of competencies and diplomas
- WP4 On-the-Job Training (OJT) programs
- WP5 New concepts and new tools for an ERPC
- WP6 IAEA E&T modules and European requirements
- WP7 Validation of results and recommendations for pilot course
- WP8 Establishment of a consortium of universities

Work packages



Main deliverables

- The proposal for the establishment of a universities consortium
- The delivery of a pilot session for training in radiation protection
- The recommendations regarding the recognition of this training, especially for the qualified experts

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Beyond ENETRAP

- Transfer outcome of ENETRAP and expand to EU member and candidate states
  - *Use links with other networks*
- Sustainability of the network
  - *Exchange of information on training courses, events, on-the-job training opportunities, standardizing training modules, efficient use of resources (sharing lecturers and training facilities), contacts with end users*
- ENETRAP “design” might be used in other fields
- Expand to radiation protection officers and workers
- European platform for education and training