

# ENETRAP II 7FP Development of E&T schemes for radiation protection experts and officers

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# Today's situation

- Over past years: decrease in number of experts in radiation protection (as is the case with all nuclear expertise)
  - Retirement + not enough new experts
- Increased attention to RP is needed: "nuclear renaissance", more technologies (and more frequently used) rely on radioactivity (in nuclear, non-nuclear and medical sector)
- Fill the gap AND prepare for the future needs



# Attract new people – how?

- Increase awareness that knowledge of radiation protection science is important
- Make the work in radiation protection more attractive for young people: provide attractive career opportunities related to RP (at all levels; in industry, research, ...)
- Support of young students and professionals in their need to gain and maintain high level radiation protection knowledge and skills
- Develop good infrastructure for education and training
  - to combat the decline in expertise and
  - to assure high level of RP knowledge and skills in the future



# Development of E&T activities

### on

European

level



### Harmonized approach

- Reducing differences; finding a common basis for E&T
- Mutual recoginition of RP courses (and providers)
- Clear and uniform terminology on professions in RP
- Mutual recognition of acquired competences of RPE, RPO, workers

will facilitate the development of a common RP (and safety) culture and the mobility of workers

### Legal framework

- 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 radiation
- Communication 98/C 133/03, concerning its implementation



# Terminology Qualified Expert

 Person having the knowledge and training needed to carry out physical, technical and radiochemical tests enabling doses to be assessed,

and to give advice in order to ensure effective protection of individuals and the correct operation of protective equipment,

whose capacity to act as QE is recognized by the competent authorities.

A QE may be assigned the technical responsibility for the task of radiation protection of workers and members of the public.





- In answer to legal requirements: almost all EU member states and candidate states provide an E&T program, based on European Basic Safety Standards and the definition of "qualified expert"
- BUT
  - Wide variety of national approaches for E&T programs and for the recognition of "qualified experts" in EU member states
  - Wide variety in terminology (QE, RPE, RPO, ...)
- First approach to harmonization by ENETRAP 6FP (2005-2007)



# ENETRAP 6FP (2005-2007) most important realisations



Coordinator SCK•CEN

Partners
CEA-INSTN
FZK-FTU
BfS
CIEMAT
NRG
ENEA
HPA-RPD
UJF Grenoble
NHC Scotland

- Establishment of Consortium of Universities → Launch of European Master in RP → www.emrp.info
- ENETRAP questionnaire, resulted in an overview on:
  - A. numbers of RPE's and RPO's;
  - B. identification of practices;
  - c. national capabilities for E&T in RP;
  - D. regulatory requirements and
  - E. recognition
- Development E-learning modules via MOODLE
- Advise on implementation of OJT/WE
- Introduction of peliminary "ENETRAP training scheme"

www.sckcen.be/enetrap



# Meanwhile °2006 EUTERP Platform



#### Coordinator NRG

Steering
Committee
EC DG TREN
Art.31
SCK•CEN
HPA-RPD
RSC

Observers
EC DG RTD
EFOMP
IAEA
IOE

**IRPA** 

- Platform of stakeholders (E&T providers, authorities, end-users, ...)
- Supported by DG TREN, 3 years
- Main objectives
  - to facilitate the transnational access to vocational E&T infrastructures;
  - to harmonise the criteria and qualifications for and mutual recognition of qualified RP professions;
  - to remove obstacles for the mobility of these professions within the European Union;
  - to give advise for revision of BSS.
- Towards self-sustainable Platform in 2009 / legal entity www.euterp.org





- Advisory role in revision of European BSS
  - Proposed new definition for RPE, RPO:

RPE "an individual having the knowledge, training and experience needed to give radiation protection advice in order to ensure effective protection of individuals, whose capacity to act is recognised by the competent authorities"

RPO "an individual technically competent in radiation protection of matters relevant for a given type of practice who is designated by the undertaking to oversee the implementation of the radiation protection arrangements of the undertaking"

- Uses input from ENETRAP 6FP for discussions on future developments
- Results of the discussion input for further work







Coordinator SCK•CEN

#### **Partners**

CEA-INSTN
KIT-FTU
BfS
CIEMAT
NRG
ENEA
HPA-RPD
ENEN Association
ITN
BME
UPB

ENETRAP II coordination action

 European Network for Education and Training in Radiation Protection – part II

Submitted for 7FP, Theme: Fission-2008-5.1.1,
 Euratom Fission Training Schemes (EFTS) in all
 areas of Nuclear Fission and Radiation Protection

 EC contribution 800 000 EUR, equal contribution from partners





### Overall objective

to develop European high-quality "reference standards" and good practices for E&T in radiation protection, specifically with respect to the RPE and the RPO.

These "standards" will reflect the needs of the RPE and the RPO in all sectors where ionising radiation is applied (nuclear industry, medical sector, research, non-nuclear industry).

The introduction of a radiation protection "training passport" as a mean to facilitate efficient and transparent European mutual recognition is another ultimate deliverable of this project.



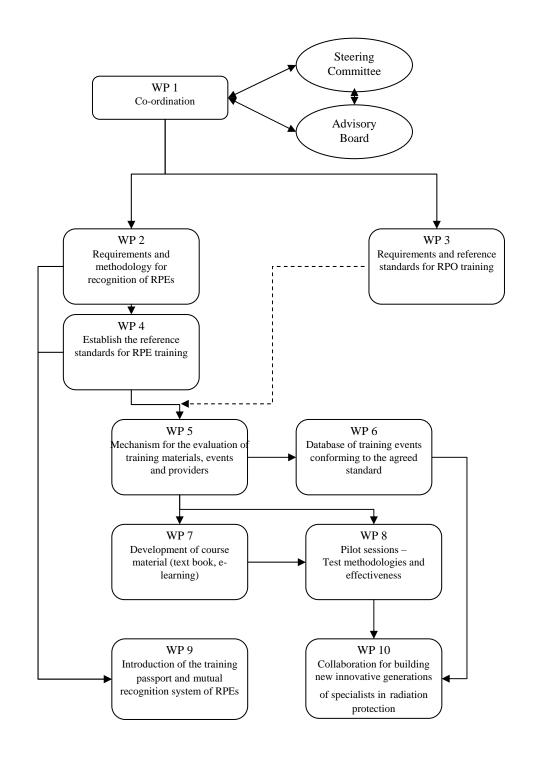
# Specific objectives

- ➤ Develop the European reference standards for RPE and RPO training and based on that develop training scheme (ERPTS);
  - Specific attention to topics, including "non-technical/soft skills", OJT/WE, ...
- ➤ Develop and apply a mechanism for the evaluation of training material, courses (and providers);
- ➤ Establish a recognised and sustainable "quality label" for training events;
- Create a database of training events and training providers;
- ➤ Bring together national initiatives to attract early-stage radiation protection researchers on a European level;
- Develop some course material examples (including e-learning);
- ➤ Organise pilot sessions of specific modules of the ERPTS and monitor the effectiveness according to a developed system;
- ➤ Development of a European passport for CPD in RP.



> WP1	Co-ordination of the project
> WP2	Define requirements and methodology for recognition of RPEs
> WP3	Define requirements for RPO competencies and establish guidance for appropriate RPO training
> WP4	Establish the reference standard for RPE training
> WP5	Development and apply mechanisms for the evaluation of training material, events and providers
> WP6	Create a database of training events and training providers (including OJT) conforming to the agreed standard
> WP7	Develop of some course material examples (text book, elearning modules,)
> WP8	Organise pilot sessions, test proposed methodologies and monitor the training scheme effectiveness
> WP9	Introduction of the training passport and mutual recognition system of RPEs
> WP10	Collaboration for building new innovative generations of specialists in radiation protection







# **ENETRAP II Advisory Board**

- ➤ The composition of the Advisory Board is such that all relevant stakeholders, with respect to the stated aim of the project, are represented, i.e. regulatory authorities, international organisations, professional organisations, training providers, research institutes, medicine and industry
- ➤ The Advisory Board will advise about the best balance between supply and needs of training, thereby ensuring stable feedback mechanisms to the Steering Committee
- Potential members of the Advisory Board: EUTERP, HLEG (MELODI), IAEA, EFOMP, OECD, IRPA, the regulatory bodies, Art 31 Expert Group, industry, ...



### **ENETRAP II**

### Outcome

will be instrumental for the cooperation between regulators, training providers and customers (nuclear industry, medical sector, research and non-nuclear industry) in reaching harmonization of the requirements for, and the education and training of, RPEs and RPOs within Europe, and will stimulate building competence and career development in radiation protection to meet the demands of the future.

First results

presented at this conference on Wednesday



# Thank you for your attention

