

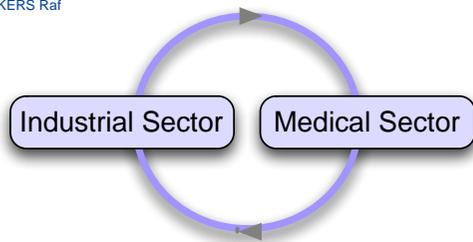


# Training Schemes on Nuclear Safety Culture for Managers

A project of the 7<sup>th</sup> Framework Programme of  
the European Commission, coordinated by UCL,  
Louvain-la-Neuve



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## Nuclear Safety Culture

is the result of a continuous effort and commitment to keep high safety standards at all steps of design, construction, operation and dismantling of nuclear installations, including transport of fuel, waste, and other radioactive materials like medical radioisotopes. It includes the requirement to match the ALARA<sup>1</sup> goals of the radiological protection of the persons.

Nuclear safety culture is based on knowledge and understanding, research, experience feedback, training and communication, management commitment, assessments, as well as regulation and regulatory processes.

## Nuclear safety in the European Union

In the European Union, nuclear safety harmonization is the subject of a Council Directive issued on 25<sup>th</sup> June 2009: *“Member States shall ensure that the national framework in place requires arrangements for **education and training** to be made by all parties for their staff having responsibilities relating to the nuclear safety of nuclear installations in order to maintain and to further develop expertise and skills in nuclear safety.”*

In addition, the idea of a “European Passport” acquired through training using the ECVET system (European Credit system for Vocational Education and Training) is gaining interest.

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<sup>1</sup> ALARA = As Low As Reasonably Achievable

## Objectives of the TRASNUSAFE project

TRASNUSAFE aims at designing, developing and validating two training schemes on nuclear safety culture, with a common basis:

- A training scheme related to the nuclear industry;
- A training scheme related to the installations making use of ionising radiation based technology (mainly in short: the nuclear sector).

## Targeted audience

The two training schemes are developed for professionals at a high level of managerial responsibilities in nuclear installations or in the radiotherapy departments of hospitals. It includes the design of the installations, their construction, operation and dismantling, the transport of fuels, waste and radioisotopes. All types of nuclear installations are concerned: nuclear power plants, research reactors, waste treatment units, etc.

The project is thus aimed at addressing the needs of managers responsible for safety in the industrial as well as the medical sector.

## Timing

The duration of the project is 48 months: from 1<sup>st</sup> November 2010 to 31<sup>st</sup> October 2014.

## Organisation of the project

The project is organised in five Work Packages (WP): see the diagramme on next page.

### WP1 – The analysis of the needs

Through surveys and seminars, WP1 provides qualitative information on the characteristics of the potential trainees, their professional environment, and their expectations. It also enables to evaluate the provisional fluxes of managers that can be expected for the trainings, and in particular the most relevant training modules to be developed.

### WP2 – Relations between radiation protection (ALARA principle) and nuclear safety culture

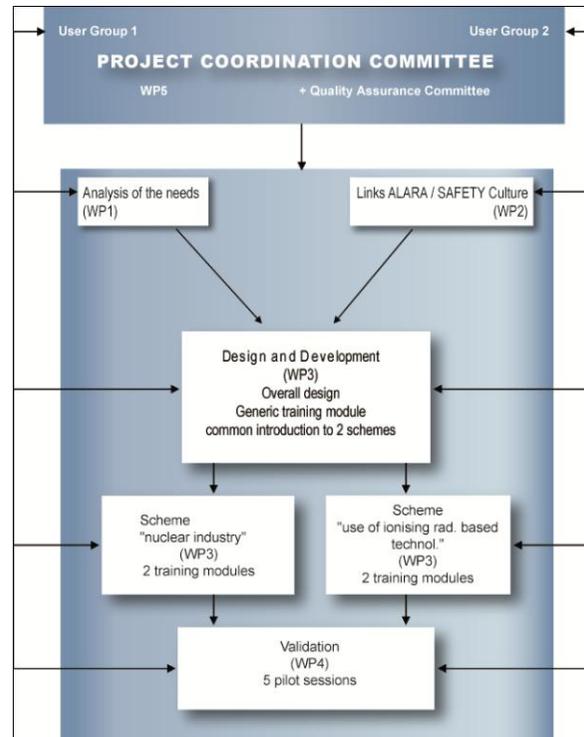
Two reflection groups on this this topic are launched: one with the EUTERP<sup>2</sup> Association, and the other with the EAN<sup>3</sup> network. They both contribute to the definition of the core contents of the training module common to the two schemes.

### WP3 – Design and Development of training schemes

Based on the results of WP1 and WP2, WP3 is aimed at designing and developing one common generic training module and two specialised training modules: one for safety managers of the industrial sector, and the other for the medical sector. WP3 is also responsible for training the trainers of the pilot sessions and the resumption of the design and development for final validation.

<sup>2</sup> EUTERP is the European Training and Education in Radiation Protection Foundation, created in 2009;

<sup>3</sup> EAN is the European ALARA network established in 1966 by the European Commission.



### WP4 – Validation of the two training schemes

Five pilot sessions will be organised to test and assess the five training modules. ECVET will be used as a certification tool.

### WP5 – Coordination and Quality Assurance of the project

## Coordination of TRASNUSAFE

UCL – Louvain-la-Neuve – Belgium

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### WP leaders

WP1 – SCK•CEN – Belgian Nuclear Research Centre

WP2 – CEPN – France

WP3 – TECNATOM – Spain

WP4 – UNIMAN (University of Manchester) – UK

### Other Participants

CIRTEN – Consorzio Interuniversitario Nazionale per la Ricerca Tecnologica Nucleare - Italy

EAN – European ALARA Network – France

ENEN – European Nuclear Education Network Association – France (with resources of AALTO, Finland, INSTN, France, and BME, Hungary)

ITN – Instituto Tecnológico e Nuclear – Portugal

JSI – Jozef Stefan Institute – Slovenia

STUBA – Technical University of Bratislava – Slovakia

UPB – University Politehnica of Bucharest – Romania

UPM – Politechnical University of Madrid – Spain

### Members of the User Groups (UG1 and UG2)

TRACTEBEL ENGINEERING, s.a. – Belgium (leader of UG1)

CNCAN – Romanian regulatory body (leader of UG2)

EITA – European Isotopes Transport Association, represented by ISI, s.a. – Belgium

SEAS – Slovenske Elektrarne – Slovakia

SNN – Nuclearelectrica, s.a. – Romania

AREVA – France

EDF – Electricité de France

ELECTRABEL, s.a. – Belgium

SORGIN – Italy

VATTENFALL – Sweden