



**3<sup>rd</sup> International conference on Education and Training in Radiological Protection**  
23-25 November 2005, Brussels, Belgium

*- This text will serve as a basis for the plenary discussion on Thursday 24 November 2005 -  
- the aim is to identify key elements for further consideration by E&T policy makers, to be taken  
up in the ETRAP2005 conference declaration -*

Covering electricity production, medicine and industrial radiography, the spectrum of applications of ionising radiation is very wide. Although working with a variety of responsibilities and specific professional aims, practitioners have a triple common need:

- a basic education and training providing the required level of understanding of artificial and natural radiation,
- a standard for the recognition of skills and experience,
- an opportunity to fine-tune and test acquired knowledge on a regular basis.

From an executive perspective, education and training are undoubtedly the two basic pillars of any policy regarding safety in the workplace.

International meetings, publications and recommendations with regard to safety culture increasingly stress the need for education and training in the field of radiological protection (RP E&T). In addition, complying with specific European directives concerning the implementation of a coherent approach to RP E&T becomes crucial in a world of dynamic markets and increasing workers' mobility. Finally, the enlargement of the EU by 10 new member states has to be considered as an additional challenge regarding the fulfilment of these requirements.

ETRAP2005, the 3<sup>rd</sup> International conference on Education and Training in Radiological Protection, brought together practitioners and policy makers from the medical and nuclear engineering sector and the non-nuclear industry, alongside social scientists, safety experts, regulators, academics and representatives of national authorities and of the key international organisations.

The conference acknowledges and reconfirms that

- RP E&T should be based on the latest knowledge in biology and physics, and should make use of the know-how from experienced installations and state-of-the-art tools;
- the radiological protection rationale that serves as the basis for RP E&T is the same all over the world, going beyond cultural differences and disciplinary applications;
- practice is an essential element of RP E&T, in addition to the theoretical knowledge;
- RP E&T programmes should integrate and advocate internationally recognised safety standards;
- pioneering work has been done already, by international organisations and by specific institutes and individuals, but the need for a coherent approach to RP E&T policy is still felt by managers, by those responsible for safety and by workers in the field.

In this spirit, ETRAP2005 showed a common readiness to provide a coherent answer to the above mentioned triple need.

The conference asks the end users, in coordination with the relevant authorities, to put the following recommendations into practice:

- attach major importance to the essential role of RP E&T in ensuring the safety of practices;
- share lecturers, training facilities and educational source material and initiate international exchange of knowledge and experience, in order to ensure harmonisation of approaches and maximum use of existing resources;
- organise experience feedback (lessons learned) and ensure traceability by documenting the acquired education and training of every individual practitioner;
- link radiation safety with conventional safety in order to teach workers how to acquire an integrated safety culture;
- organise in-house training inspection and auditing of training programmes;
- look beyond the hard sciences by developing RP E&T programmes in a transdisciplinary way, integrating social and ethical aspects;
- Explore the use of new techniques and tools for training (e.g. e-learning, on-line examinations).

In addition, towards the national authorities, ETRAP2005 recommends to

- stimulate the streamlining of various national and local RP E&T initiatives in order to ensure synergy and maximum use of RP E&T resources (lecturers, facilities, tools, know-how);
- extend the official (national) system of recognition of acquired education in order to incorporate recognition of specific required training of workers;
- Identify the training needs and adopt a strategy to meet the needs.

Finally, ETRAP2005 calls the relevant international institutions and organisations for action, in particular to:

- facilitate and stimulate sharing and interchange of national and local RP E&T resources;
- develop international guidelines for national inspection and auditing systems and for traceability (documenting the received training), in addition to international standards and minimum requirements for RP E&T resources;
- initiate international RP E&T courses with contributions of national partners, in order to ensure synergy and maximum use of RP E&T resources on the international level, and to broaden the areas of experience of lecturers as well as students;
- define categories of addressees (workers, radiation protection officers, qualified experts, ...) of education and training activities as a prerequisite for harmonization and mutual recognition of courses and certification systems;
- strive to make requirements more legally binding by pleading for the integration of the inspection concept in basic safety standards and for the attribution of an international value to diplomas and certificates;
- enrich future research policies by also focussing on aspects of training along with education, and by taking a transdisciplinary approach to RP E&T;
- initiate and support the establishment of platforms for dialogue, networking and research, and support the follow-up of ongoing valuable initiatives.