What is ETKM WG and who is it aimed at?

Education, training and the renewal of competencies in engineering and sciences is a cornerstone in Europe’s vision for the development of nuclear fission energy. If one is going to deliver the long-term goal of sustainable nuclear fission, it will be necessary to have an adequate resource of well educated and trained young professionals coming into the field, whilst retaining the expertise and competencies.

Therefore, in parallel to the development of the Strategic Research Agenda and Deployment Strategy, it was agreed that work on Education and Training (E&T) and Knowledge Management (KM) should be an important cross-cutting activity within SNETP. A Working Group (WG) was created to act in close co-operation with the other working groups in order to provide a coherent approach for education, training and knowledge management (ETKM WG).

It is recognised that education, training and knowledge management are quite distinct activities, yet they overlap to some extent (Fig. 1).

ETKM WG will:

- Identify education and training gaps and recommend actions at appropriate levels,
- Take account of the knowledge that has been accumulated in companies, research centres or regulators and recommend actions for transferring it to younger generations,
- Support the dialogue on international cooperation in the field of E&T between EURATOM and non-EU countries.

More specifically, the ETKM WG will recommend to the SNETP Governing Board a future framework for nuclear E&T and KM at the European level; in a second step, the group will engage in developing a plan to implement this framework in a sustainable manner, in order to contribute to the further development of nuclear energy technology in Europe.

Objectives of ETKM WG

- Identify a course of action to secure an adequate resource of well educated and trained young professionals to support the research recommended in the Strategic Research Agenda,
- Identify the steps required to meet the demand of industry for new competent personnel and the need for teachers in academia,
- Collate the facilities – both existing and required – to develop the future human resource necessary to support the Strategic Research Agenda.

Scope of ETKM WG

The scope of the ETKM WG is sufficiently broad to allow a comprehensive approach to E&T and KM involving all appropriate stakeholders and disciplines and their interactions to be addressed.

As a first step, the working group will address E&T of engineers and scientists. The scope could be extended later to other personnel, such as technicians.

The content scope includes E&T in nuclear sciences, and in all the other disciplines necessary for the nuclear energy field.

ETKM and ENEN: two complementary approaches

According to its statutes, the mission of ENEN (European Nuclear Education Network Association) is the preservation and the further development of nuclear expertise by education and training. This objective should be realized through the co-operation between universities / higher education establishments, research organisations, regulatory bodies, industry and any other organisations of nuclear engineers / scientists.

The ETKM WG and the ENEN thus have complementary goals. On one hand, ENEN is a member of the ETKM WG where it has a pivotal role, providing information and ideas for the elaboration of recommendations, and later taking part in their implementations. On the other hand, ETKM will support the ENEN activities contributing to the implementation of its recommendations.
In order to elaborate its recommendations, the working group has devised five subgroups:

- Subgroup 1 is focused on the needs of the nuclear field in human resources,
- Subgroup 2 ensures co-ordination within SNETP and with other European forums,
- Subgroup 3 will consolidate E&T programmes necessary to meet stakeholder requirements and addresses the human resources required to deliver E&T and KM,
- Subgroup 4 is focused on the facilities to support E&T and research,
- Subgroup 5 is focused on international co-operation with non-EU countries for ETKM.

Subgroups 1 and 3 will enable a gap analysis between demand and offer, whereas Subgroups 4 and 5 are investigating the requirements to improve the current situation. Finally, Subgroup 2 ensures that the working group works in accordance with the other activities in SNETP and acts as a contact point with the ENEF (European Nuclear Energy Forum) and, if needed in a further step, with other Technology Platforms.