



# **NEA Nuclear Education, Skills and Technology (NEST) Framework**

## The NEST Framework

NEA member countries need scientists, engineers and technologists to ensure the safe, secure and sustainable use of nuclear energy, to meet global energy demands and environmental challenges.

The NEA is addressing the concerns of member countries about the potential loss of nuclear expertise and knowledge by creating new approaches to retain, nurture and expand this knowledge base, as well as building the new capabilities needed for innovative nuclear technologies.

The NEST Framework is the NEA's response to this need. It is a joint undertaking bringing together public and private organisations such as academia, research centres and industries.

### Goal and objectives

The goal of the NEST Framework is to encourage postgraduate students, post-

doctoral researchers and young professionals to pursue careers in the nuclear field by exposing them to challenging projects and real-world problems. The NEST Framework aims to transfer the knowledge accumulated by the current generation of nuclear experts.

Its overall objectives are to:

- Assist countries to maintain and strengthen academic nuclear-related education programmes and to build both technical and non-technical skills in the field of nuclear science, the safe use of nuclear technology, and its application.
- Facilitate the skills development of students and young professionals in the nuclear sector through the transmission of practical knowledge and hands-on training.
- Establish sustainable international exchanges and co-operation among the participating organisations.

### Added-value and benefits

The NEST added-values and benefits are:

- Fast-track processes to build up the next generation of nuclear experts and professionals through hands-on exposure to real-world problems and by working on challenging and innovative projects.
- Access to a critical mass of capacities (infrastructures, construction or decommissioning projects, innovative activities...) in close co-operation with universities, available within the NEST membership to NEST Fellows (MSc, PhD, Young Professionals) via international co-operation.
- Development of a network of promising young professionals, nuclear experts and leaders in the field.





Turbine Hall, Paks NPP, Hungary (Akos Bodajk)

## Projects and selection criteria

The NEST Framework will include a wide variety of projects and activities in such key areas as safety-relevant phenomena in containment during accidents, remote technology use in decommissioning, radioactive waste management, small modular reactors and molten salt reactors.

To be included in the NEST Framework, projects and activities need to meet the following criteria:

- address multidisciplinary challenges in the field of nuclear science and technology and applications;
- offer hands-on training opportunities for each NEST fellow;
- include at least three countries.

## Current participation

As of February 2019, 15 organisations from 10 countries (Belgium, Canada, France, Germany, Italy, Japan, Korea, Russia, Switzerland and United States) are participating in the NEST Framework. These countries and organisations wish to co-operate

through international exchanges and activities to strengthen nuclear-related education programmes, build technical and non-technical skills in the field of nuclear science, and foster the safe use of nuclear technology and its applications.

## How to join

The NEA supports participation in the NEST Framework and is keen to engage further with member countries who wish to train a new generation of professionals, and who value long-term and sustainable international co-operation in the area of nuclear education, skills and technology. Countries and organisations that wish to join the NEST Framework can do so by contacting the NEA Secretariat.

## Further information

For further information, please contact the NEA Secretariat:

Nuclear Energy Agency  
46, quai Alphonse Le Gallo  
92100 Boulogne-Billancourt  
E-mail: [nest@oecd-nea.org](mailto:nest@oecd-nea.org)  
[www.oecd-nea.org/nest](http://www.oecd-nea.org/nest)

## Participating organisations

---



UNIVERSITÀ  
DEGLI STUDI  
DI MILANO



Korea Atomic Energy  
Research Institute



The Nuclear Energy Agency (NEA) is an intergovernmental agency under the framework of the Organisation for Economic Co-operation and Development (OECD) headquartered in Paris, France. Its main objective is to promote international co-operation assisting member countries in maintaining and further developing the scientific, technological and legal bases required for a safe, environmentally friendly and economical use of nuclear energy for peaceful purposes.

---