

ENSTTI, the European Nuclear Safety Training and Tutoring Institute, is born

In an unprecedented joint initiative, four European TSOs¹ (IRSN in France, GRS in Germany, UJV in the Czech Republic and LEI in Lithuania) have created ENSTTI, the European Nuclear Safety Training and Tutoring Institute. The Institute will offer short applied training sessions and longer courses based on tutorials for university graduates and for those with some professional experience in the nuclear sector. Its focus will be on transmitting European research and assessment know-how in the fields of nuclear safety and radiation protection.

Drawing on the competences and resources of member TSOs, ENSTTI will provide training in techniques, practices and methods to develop the skills and know-how required for assessing and analysing nuclear and radiological risks in Europe and throughout the world.

In creating ENSTTI, the founding TSOs – in association with the relevant EU and international bodies and the IAEA in particular - aim to meet assessment and research requirements in the nuclear safety sector relating to civil nuclear development programmes in Europe and the world as a whole.

The Institute's Scientific Council has been assigned the task of guiding and standardising teaching and tutoring content and practices to reflect the state of the art in European assessment know-how.

Training at ENSTTI will be given in the form of course programmes lasting around six weeks and tutorial periods of several months. All the course programmes will include working groups, simulator sessions, technical visits and open discussions. Trainees will receive a certificate at the end of their training period reflecting the knowledge they have acquired.

Training courses are open to individual applicants from inside and outside Europe with at least a Master's degree and basic knowledge in the nuclear field, TSO and Nuclear Safety Authority professionals as well as nuclear operators and designers.

The first training session has already been scheduled. It is divided in two parts: the first part will take place at GRS in Munich from 12 to 30 July 2010, while the second part will be organised at IRSN in Fontenay-aux-Roses from 30 August to 17 September 2010.

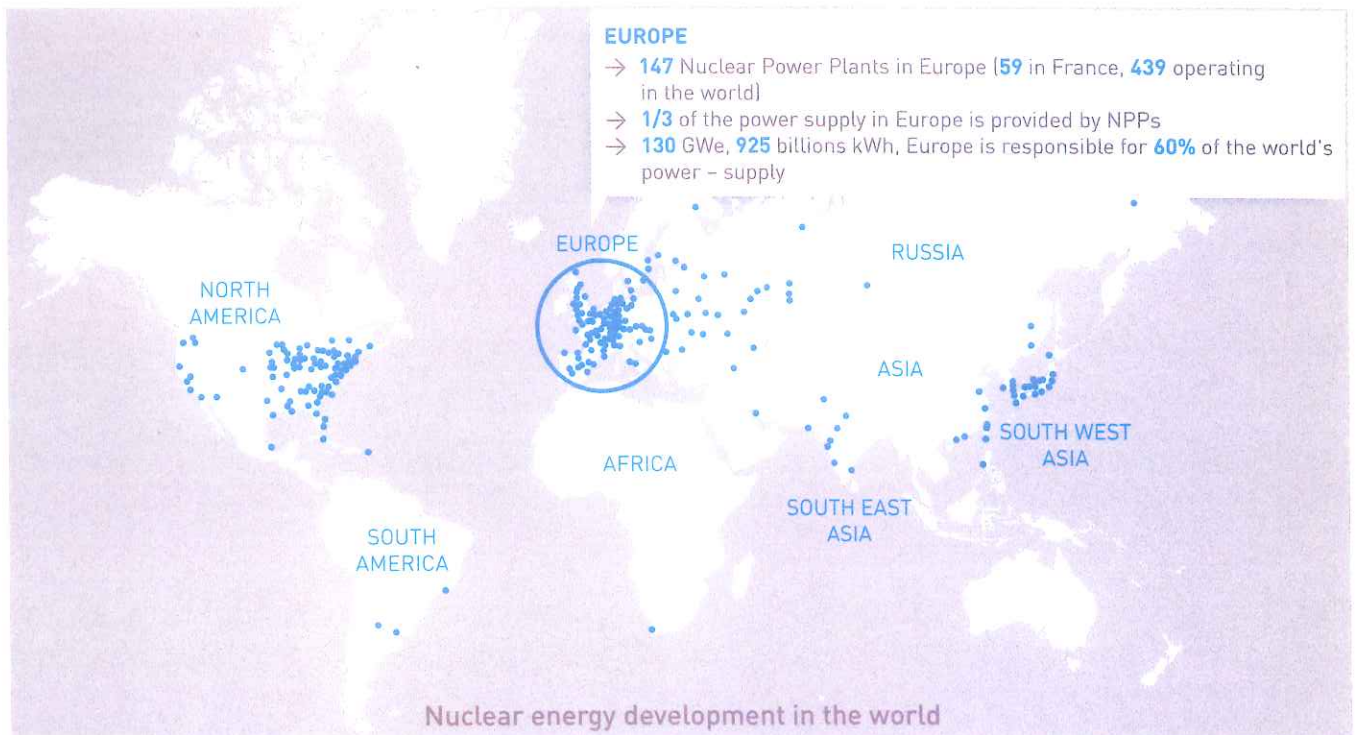
1 A Technical Safety Organisation - or TSO - is a technical and scientific organisation that carries out independent assessments and analyses of nuclear facility safety and radiological risks. Its activities comply with best practices in the field of risk assessment and meet internationally-agreed and applicable scientific baselines and standards.

ENSTTI INITIATIVE

Sustaining the long-term safety performance of civil nuclear installations

In order to face the safety of long term operation of the older nuclear power plants as well as the safety of the new ones, the competences in nuclear safety have to be enhanced or developed at a very high rate.

Beyond the large education effort in which TSOs are already involved, ENSTTI initiative, in association with the European Union and the IAEA, works to drive the training of the new generation professionals in nuclear safety.



Wide spectrum of TSOs' competences

TSOs cover the whole spectrum of competences in nuclear safety, including nuclear plants and fuel cycle as well as radiation protection and citizens involvement.

More than 40 years experiences in the field of nuclear safety and radiation protection are considered as a reference around the world.

Constant update of this know-how on the basis of operating experience feedback, on the latest research results of Europe's TSOs* and on the great effort of the EUROS SAFE* network to standardize practices.

ENSTTI provides training in the techniques, practices and methods required to develop assessment in nuclear safety and radiation protection in Europe and in the rest of the world, for a sustainable nuclear energy industry.

Governance

- The Board, Directors Generals of the ENSTTI partners, manages the ENSTTI.



- The Scientific Council (ENSTTI partners: GRS, IRSN, LEI, UJV, nuclear authority: CSN, international organizations: IAEA, EC, industry: AREVA) guides and standardizes teaching and tutoring contents and practices to reflect the state of the art in international assessment know-how.
- The Executive Directorate implements the training and tutoring activities of ENSTTI.

Theoretical and tutoring-based training courses leading to a certificate

Personalized training programs

ENSTTI offers short applied training sessions and longer tutoring periods for university graduates and for those with some professional experience in the nuclear sector. After a knowledge appraisal, each applicant is directed to the training program that best meets his/her requirements. The personalized support is continued through regular contacts with safety experts once the trainee returns to work.

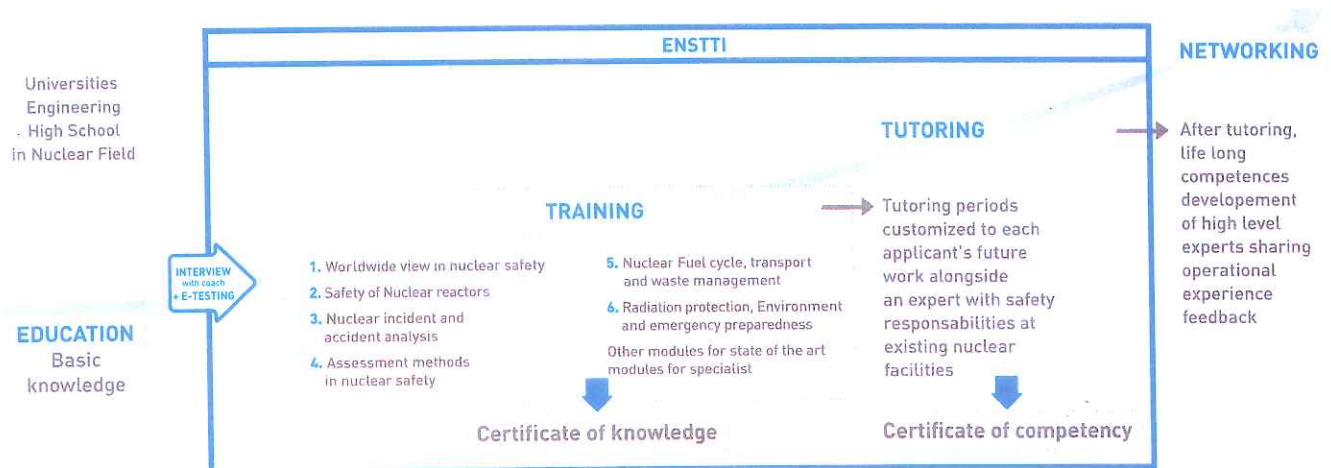
Training

6 modules on the basics of nuclear safety, reactor safety and security issues, radiation protection and health and environmental risk assessment and analysis. All the course programs include working groups, simulator sessions, technical visits and open discussions. Certificate at the end of the training period reflecting the knowledge acquired.

Tutoring

During the tutoring periods customized to each applicant's future work, trainees work alongside an expert with safety responsibilities at existing nuclear facilities.

The content and duration of tutoring periods are adapted to the profile of each individual.



ENSTTI Candidate Process

Training with an international profile

The teaching staff at ENSTTI is directly recruited among prominent members of European TSOs who are professionals with practical responsibilities in their field of teaching for the nuclear installation safety.

The TSOs work with the European Union and the IAEA to develop course programs.

ENSTTI training courses are open to professionals from inside and outside Europe, TSO and Nuclear Safety Authority professionals, operators and/or nuclear designers.

Selection and registration

Applicants are selected following an assessment of their technical knowledge in the nuclear field through an interview with a senior expert from a TSO, with the aim to identifying for each applicant personal training requirements including a tutoring scheme adapted to the future applicants work.

Part 1: July, 12nd - 30th, 2010 – GRS Munich (Germany)

Module 1: Basics and worldwide overview in nuclear safety (Munich, July, 12th - 16th)

Basics in nuclear safety, reactor physics, thermal hydraulics, radiation protection principles, safety and security principles, Role of authorities, Global Nuclear Safety Regime, IAEA safety standards, international cooperation, European initiatives

Module 2: Safety of nuclear reactors (Munich, July, 19th - 23rd)

PWR & BWR technologies, EPR, other technologies (VVER, CANDU), Gen IV, research reactors, reactor operation, experience feedback including technical visit TC1: Nuclear Power Plants

Module 3: Nuclear incident and accident analysis (Munich, July, 26th - 30th)

Nuclear incident and accident analysis PWR & BWR, severe accident and improvements

Part 2: August, 30th – September, 17th, 2010 - IRSN Paris (France)

Module 4: Safety Assessments (Paris, August, 30th - September, 2nd)

Safety assessment, internal and external hazards, siting, human factors, ageing, PSA1-PSA2

Technical visit TC2: Flammanville NPP and La Hague reprocessing center (September, 2nd-4th)

Module 5: Nuclear fuel cycle, transport of radioactive material and waste management (Paris, September, 6th - 13th)

Fuel cycle safety (complete or reduced fuel cycle), nuclear fuel supply safety, reprocessing safety, MOX safety, Safe transport of radioactive material, decommissioning, waste management (regulations and safety), surface disposal, deep disposal

Technical visit TC3: Nuclear research center (Paris, September, 14th)

Module 6: Radiation protection, environment and emergency preparedness (Paris, September, 15th - 17th)

Risk assessment induced by ionizing radiation induced, applicable dosimetry, nuclear accident and emergency preparedness

Training

The whole training programme will include working groups, simulator sessions, technical visits, tests and open discussions. Trainees will receive a certificate at the end of the complete training period reflecting the knowledge they have acquired.

In order to maximise the knowledge acquisition, the training should be considered as a whole. So, priority will be given to candidates applying to the complete training programme. However, candidates could wish to follow one module or several ones and specific technical visits.

Tutoring

In order to integrate a real practice of the day to day safety work, ENSTTI provides a Tutoring programme within the expert teams of the ENSTTI partnership, customized to each applicant's future work.

Registration

Training courses are open to individual applicants from inside or outside Europe with at least a Master's degree in the nuclear field, TSO and Nuclear Safety Authority professionals as well as nuclear operators and designers.

Candidates have to apply to the training programme by the end of April, 2010.

The registration process consists in:

- Fulfilling a preliminary registration form, then a questionnaire on nuclear basics
- Having a discussion with a technical expert to define the best orientation within ENSTTI programmes

For more information about ENSTTI programmes, especially tutoring and registration process:
www.enstti.eu

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INFORMATION REQUEST

To receive more information about ENSTTI programmes, please fulfil the following form and send it back by fax to + 33 1 58 35 85 09 or by mail to IRSN - Karim Ben Ouaghrem – B.P. 17 - 31, avenue de la Division Leclerc - 92262 Fontenay-aux-Roses Cedex – France.

Name: _____ Office address: _____

First Name: _____

Organisation: _____ Zip code: _____ Town: _____

Title: _____ Country: _____

E-mail address: _____ Information request: _____
