European Union Activities for Training and Tutoring Activities of Regulatory Authorities and their Technical Support Organisations

Pascal Daures*, Ynte Stockmann*, Henri Pauwels*

Training and Tutoring for experts of the nuclear regulatory authorities (NRAs) and their technical support organisations (TSOs) for developing or strengthening their regulatory and technical capabilities.

Topics

- Nuclear Safety Regulation,
- Licensing and Enforcement,
- Nuclear Safety Assessment
- Inspection

for **regulators** by regulators, transferring **European Union regulatory experience** and **best practices** in the area of **nuclear safety regulation** and **radioprotection**.

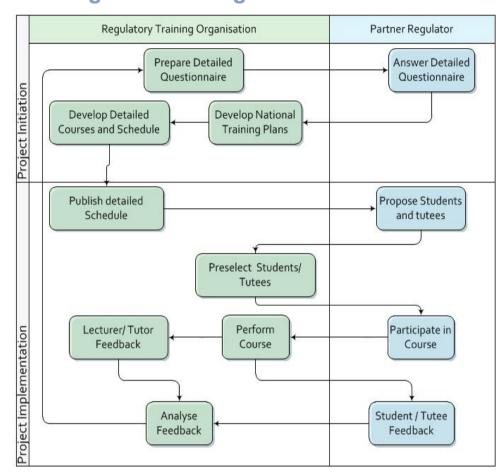
Transfer of **regulatory skills**, based on experience and theoretical knowledge from a nuclear safety regulatory perspective.

Approved projects in 2010, 2011 and 2013, 3 million € each. Implementation: 2011-2017.

Courses first project 2011-2014

Nuclear Safety Regulation, Licensing and Enforcement	Nuclear Safety Assessment and Inspection
EU Acquis and Radiation Protection, laws and regulation, RB functions, licensing and enforcement	Induction to nuclear safety
Management of licensing, safety focused	Criticality Safety and
analytical techniques, decision making	Thermohydraulics
Basic Nuclear Safety Concepts	Ageing and Mechanical Analysis
Site Inspection	Nuclear Reactor Safety I
Inspection of I&C	Nuclear Reactor Safety II
Inspection of safety systems and structures	Fire Protection
Inspecting of safety culture and Q.A.	Radiation Protection
Inspection of radiation protection for the environment for nuclear reactors	Safety Assessment 1
Inspection of occupational radiation protection	Safety Assessment 2
Assessment of design concepts	Nuclear Security
Assessment of Operating limits and Conditions for nuclear installations	Decommissioning Safety
Assessment of criticality control	Safety Management for NRA
Assessment of Safety Assessment Reports and PSA of NPPs	Nuclear Fuel Cycle Safety
Assessment of Safety Assessment Reports of RRs and other nuclear installations	Operating Experience Evaluation
Assessment of safety of RW and Decommissioning activity	Site Evaluation
Emergency Preparedness and Response of the Regulator	Instrumentation & Control (I&C) and Electric Systems
Investigation of Operation Events	Human Factors
Periodic safety review and use of inspection reports in regulatory decision making	Final Disposal Safety
Public Information	

Training and Tutoring Process



Trainees and Tutees

Participants' country of origin January 2012 - July 2013 and number of students and tutees.

Armenia	18	Morocco	12
Belarus	20	Libya*	3
Brazil	25	Mauretania*	1
Egypt	17	Philippines	11
Indonesia	10	Sudan*	4
Iraq*	1	Tunisia*	3
Jordan	24	Ukraine	30
Malaysia	17	Vietnam	32
Mexico	17	Yemen*	4

^{*} through ANNuR

Contact

Project overview: http://nuclear.jrc.ec.europa.eu/europeaid-safety-

training/

Training and Tutoring Organisations:

ITER- CONSULT: http://www.iter-consult.eu/ 2010 project

ENSTTI: http://www.enstti.eu/index.php/devco,

2010 and 2011 project.

EUROPEAN COMMISSION

* EuropeAid, BRU-J-59, Instrument for Stability, Nuclear Safety, Henri.Pauwels@europa.ec.eu # JOINT RESEARCH CENTRE, Directorate F - Institute for Energy and Transport, Nuclear Reactor Safety Assessment

