

Field: EMERGENCY PREPAREDNESS AND RESPONSE

Topic: EMERGENCY PREPAREDNESS AND RESPONSE OF THE GOVERNMENTAL INSTITUTIONS INCLUDING THE REGULATOR

Course type	TUTORING	Objective
Host institute	Jožef Stefan Institute, Ljubljana, Slovenia	This course allows the tutees to understand the crucial steps of Emergency Preparedness and Response, to enhance participants' understanding of the broader context in which radiation measurement and analysis are applied. It will foster participants to grasp the roles and responsibilities of regulatory bodies in emergency exposure situations and to improve competences related to the regulatory functions and practices.
Date	06 May - 31 May 2024	
Duration	Four weeks	
Working language	English	

Outline of course content

Theoretical training

This course provides a comprehensive treatment of the essential theories and practical skills in radiation measurement and analysis of environmental samples, with particular emphasis on emergency exposure situations. It includes essential topics in emergency preparedness and response (EPR), including the basic terminology, the roles, responsibilities, functions and infrastructure required in emergency preparedness and response systems for nuclear and radiological emergencies, the development of EPR plan, and the lessons learned from past emergencies. Participants will understand the roles and responsibilities of the local, national and international organisations and the regulatory authorities in EPR. The theoretical concepts within each topic are reinforced by practical training and hands-on exercises designed to illustrate the fundamental principles underlying these theories and subjects.

During the course, participants will participate in laboratory exercises using authentic instrumentation commonly found in typical laboratories supporting emergency activities. This hands-on approach ensures that trainees, students and students will understand the theoretical concepts and acquire practical skills directly applicable to real-world radiation measurements in emergency exposure situations.

Practical work

- Laboratory activities and hands-on trainings at the host institute:
 - Lessons learned from past emergencies
 - Practical considerations in using Personal Protective Equipment
 - Radiation detection and measurement in the field
 - Field monitoring and Operational Intervention Levels (OILs)
 - Reporting data from the field
 - Quality assurance in emergency exposure situation
- Technical visits to
 - analytical laboratories
 - other radiation, nuclear and supporting facilities

Technical schedule and delivery methods

The courses consists of classroom lectures, laboratory activities, hands-on trainings and technical visits during the 4 working weeks (i.e. 4 × 5 workdays).

- **Classroom lectures** will take 8 days with 2 units per a day (tentatively morning and afternoon sessions with 2 lectures of 90 minutes each, with time allocated for discussions and appropriate breaks).
- The **exercises, laboratory activities, hands-on trainings** will take 10 days with morning and afternoon sessions.
- The **site visits** will take 2 days.

Target audience

This course is intended to experts and professionals of Nuclear Regulatory Authorities (NRAs) and Technical Support Organisations (TSOs) preferably with responsibilities and experience related to emergency preparedness.

Target number of participants: 2

Prerequisites and requirements for participants

Participants should have an adequate level of knowledge in English (at least an 'Independent user' level defined by the [CEFR](#)). A university degree with nuclear specialization and at least 3 years of professional experience in functions relevant to the content of the course is also a prerequisite.

Relevancy of the course topic in the work and institutionally justified interest in participating will be considered as well as the need and opportunity for filling competence gaps. Efforts are made to ensure gender equality.

Terms of participation

The project is implemented under the European Union (EU) external assistance programme, called the European Instrument for International Nuclear Safety Cooperation (INSC), and aims to support the National Nuclear Regulatory Authorities (NRAs) and their Technical Support Organisations (TSOs) in non-EU countries in strengthening their capabilities with regard to their regulatory tasks and responsibilities in the field of nuclear safety and radiation protection.

Employees of the NRAs or their TSOs in the Beneficiary Countries are eligible for financially supported participation in the T&T courses. Beneficiary Countries of the project are published on the website <https://training.ek-cer.hu/>.

Costs

Travel and accommodation costs and subsistence allowances (including the international and national travel tickets, shuttle services, insurance and visa costs, per diems) for participants will be covered from the project budget.

Application

Application via the website <https://training.ek-cer.hu/>, according to the process and deadlines indicated there.

Examination

Technical and linguistic tests will be written as part of the application and selection process to assess the underlying knowledge and preparedness of applicants. Knowledge and development of selected participants will be assessed through technical tests throughout the course.

Work reports will be prepared to allow for progress monitoring and determining the final development through acquisition of knowledge, practical experience and expertise, as well as task completions.

Participants attending the full course will be issued with attendance certificates. Successful participants will receive certificates confirming their knowledge achieved and skills acquired.
