



IAEA
International Atomic Energy Agency

Education & Training in Radiation, Transport & Waste Safety Newsletter



<http://goto.iaea.org/rtws-E&T>

ISSN 2304-5744

No. 05, March 2016







Contents

Education and Training Appraisal	1	Benefits	2	National Perspective	3
Introduction	2	Collecting Information	2	Regional Perspective	4
Objectives	2				

Education and Training Appraisal (EduTA)

Anniversary Edition

Since 2005, IAEA has provided technical support for the EduTA missions. The EduTA team typically comprises one IAEA staff member and two international experts. So far, 20 missions have been completed (including follow-up and preparatory missions) and three missions are planned in 2016. To describe EduTA benefits, the expectations and impacts, both National and Regional perspectives of the Member States receiving and who are about to receive EduTA missions are the focus of this newsletter.

National perspective: Member States' experience		
	Cuba	2016
	Greece	2015 ^b 2008
	Israel	2015
Regional perspective: AFRA's feedback		
	Algeria	2010
	Ghana	2010 ^b 2008
	Morocco	2010 ^b 2007

Completed: 20										Planned: 3
2005	2006	2007	2008	2010	2011	2013	2014	2015	2016	
Malaysia Singapore	Argentina	Morocco	Ghana Greece	Algeria Brazil Egypt Ghana ^b Morocco ^b South Africa	Belarus Korea Malaysia ^b	Pakistan ^a	Lebanon	Greece ^b Israel Lithuania	Cuba Peru United Arab Emirates	
						a Preparatory mission b Follow up mission				

^a Preparatory mission

^b Follow up mission

Celebrating 10 years of supporting IAEA Member States:
Building sustainable competence
in radiation, transport and waste safety

Introduction

The IAEA's Education and Training Appraisal (EduTA) service assists Member States in: building sustainable infrastructures and capabilities in education and training in radiation protection and safety. This service, which has benefited Member States since 2005, supports the [IAEA Strategic Approach to Education and Training in Radiation, Transport and Waste Safety 2011–2020](#).

Objectives

The IAEA's EduTA service provides a means to appraise, through self-assessment and peer review, the national provision of education and training in radiation protection and the safety of radiation sources in a Member State.

The objectives are:

- To carry out a detailed appraisal of the status of the provisions for education and training in radiation protection and safety;
- To identify areas in education and training, where the provisions should be improved to meet (i) the IAEA safety standards, (ii) the national education and training needs;
- To provide key staff in the host Member State with an opportunity to discuss the legislative framework and the national policy and strategy in the field;
- To promote the IAEA safety standards and guidelines relevant to the scope of the appraisal.

Benefits

Member States hosting the IAEA's EduTA service will be benefited by receiving advice on how:

- To strengthen radiation safety infrastructures through building competence;
- To improve legal and regulatory framework for education and training of all the personnel working with ionizing radiation or having responsibilities in radiation protection;
- To optimize national resources focusing on the actual national education and training needs;
- To develop sustainable mechanisms to establish and implement education and training programmes.

Collecting information

The EduTA is based on a questionnaire with a modular structure, designed to systematically collect information regarding issues related to the education and training in radiation protection and safety.

Module A: Legal and regulatory framework for education and training

The aim of the module is to assess the national legal and regulatory framework, with regard to education and

training (E&T) in radiation protection and safety. The responsibilities of the government, the regulatory body and the employer, registrant and licensee are assessed regarding the establishment, verification and application of the national requirements, and compliance with the IAEA standards is examined. The questions in this module are structured as follows:

- Establishment of requirements – Responsibilities of government and regulatory bodies
- Verification of requirements – Responsibilities of the regulatory bodies
- Application of requirements – Responsibilities of the employers, registrants, licensees.

Module B: National strategy for education and training

The aim of the module is to assess the provisions to establish a national strategy for E&T in radiation, transport and waste safety, commensurate with the current and foreseeable facilities and activities and in compliance with the national legal and regulatory framework for E&T. The module follows the different steps in establishing and maintaining a national strategy, as shown in Figure 1.



Figure 1: Steps to establish and maintain a national strategy for education and training in radiation, transport and waste safety.

Module C: Specific appraisal of the provisions for the IAEA's Postgraduate Educational Course in radiation Protection and the Safety of Radiation Sources (PGEC).

This part of the questionnaire is primarily addressed to those countries that organize the PGEC under the auspices of the IAEA. This module can also be used by any country to collect information on national initiatives to build competence at the postgraduate level in the field of radiation protection and safety.

National perspective

Cuba: Expectations from the EduTA

Cuba has developed a good infrastructure to ensure radiation protection and safety and to build competence in this area. The regulatory body (CNSN: Centro Nacional de Seguridad Nuclear), with the collaboration of training providers (CPHR: Centre for Radiation Protection and Hygiene) played an important role in this process. However, there is an increasing need for education and training (E&T) in some professional categories, particularly in the medical field. In the previous years, great effort has been made to design and implement a national



*Alba Guillén Campos, Head of CNSN
Gladys Lopez Bejerano, Director of CPHR*

policy and strategy for E&T in radiation protection in order to adopt a sustainable and systematic approach, based on the analysis of training needs and the optimization of existing capabilities and resources.

In this context, the EduTA that is planned for 2016 is considered to be as an important tool to support national efforts to:

- Identify ways to improve the national policy and strategy, and the related national E&T programme;
- Verify consistency of the national legal and regulatory framework for E&T with the IAEA Safety Standards and documents, and, if necessary, identify ways to improve it;
- Strengthen national contribution to the region within the IAEA Technical Cooperation regional project in the field of E&T in radiation protection;
- Disseminate the IAEA Safety Standards and the methodology to establish a national strategy for E&T to the other concerned national stakeholders.

Greece: Monitoring progresses with a follow-up EduTA

The Greek Atomic Energy Commission (EEAE) is the national regulatory body in the field of radiation protection and nuclear safety. Beyond the regulatory functions, its mission includes the establishment and implementation of sustainable E&T programmes in radiation protection.

Since 2003, EEAE has acted as an IAEA Regional Training Centre in radiation protection, providing courses in English for the benefit of all the Member States in the European region. In 2008, EEAE hosted an EduTA mission to assess

the existing E&T programme in radiation protection, to identify the actions needed to improve it, and to strengthen the general legal and regulatory framework for E&T in radiation protection. The mission provided the basis for the Long Term Agreement between IAEA and the Hellenic Government.

Over the last seven years, EEAE has taken important initiatives to address the recommendations from the 2008 EduTA, including the implementation of a quality



*Christos Housiadas,
Chairman of EEAE*

management system for non-formal E&T programmes in radiation protection (ISO 29990:2010) and the establishment of a national E&T programme based on the assessment of training needs.

Aiming at continuously improving the legal and regulatory framework for E&T in radiation protection as well as strengthening organizational capabilities

for E&T, EEAE recognizes the importance of the EduTA to this endeavour. Therefore, EEAE requested a follow-up mission that was conducted in October 2015. The objectives achieved were:

- Receiving advice on the actions taken to address the recommendations from the 2008 EduTA mission;
- Monitoring the progress made in the development of the legal and regulatory framework for E&T, in compliance with the IAEA Safety Standards;
- Evaluating the initiatives taken to establish the national strategy for E&T and to implement the E&T programme in radiation protection and safety;
- Identifying further ways and opportunities to be beneficial, as an IAEA Regional Training Centre in radiation protection, to other IAEA Member States in the region.

Israel: Benefits of the EduTA

The EduTA mission to Israel was conducted in May 2015.



The EduTA Team and the Israeli Counterparts

The mission was hosted by Soreq Nuclear Research Centre (SNRC).

Israel has a complex regulatory infrastructure with five government ministries and agencies regulating radiation protection of workers, patients, members of the public and the environment. Representatives from all relevant ministries and agencies took part in the EduTA mission and presented main regulations and guidelines addressing education and training in radiation protection. The EduTA team members visited the National School for Radiation Protection that trains Radiation Protection Officers and Certified Radiation Inspectors and met with leading instructors of first responders to a radiological event.

The EduTA mission provided a unique opportunity to:

- Bring together all the ministries and agencies regulating radiation protection to discuss the status of the regulatory framework for E&T;
- Reactivate the National Advisory Committee to provide a coordination framework for the actions identified during the EduTA mission;
- Strengthen national regulatory framework for E&T by identifying action to: develop and implement E&T requirements for medical practitioners; develop legislation to address optimization of radiation protection of patients during medical exposure;
- Promote a sustainable approach to build competence by adopting a national strategy for E&T in radiation protection.

The EduTA mission paved also the way for a more effective and needs-oriented request of assistance from IAEA through the Technical Cooperation programme.

Regional perspective

AFRA: supporting regional cooperation

The African Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology (AFRA) provides a framework for African Member States to intensify their collaboration through programmes and projects focused on the specific shared needs of its members. It is a formal inter-governmental agreement which entered into force in 1990.

In the context of AFRA, Regional Designated Centres for training and education in radiation protection (RDCs) are established African institutions able to provide services, such as training of highly qualified specialists or instructors needed at the national level and also to facilitate exchange of experience and information through networks of services operating in the field.



*Edward H. K. Akaho,
Chairman of AFRA-High Level
Steering Committee*

The arrangements for the recognition of RDCs include audits performed according to selective criteria based on the responses to the questionnaires. EduTA is one of the major components within the audit process. EduTA missions were conducted in the Africa Member States hosting a candidate institution to become RDC. Based on audit reports, AFRA in cooperation

with IAEA has so far recognized the Centre de Recherche Nucleaire d'Alger (CRNA) in Algeria, the School of Nuclear and Allied Sciences (SNAS) of University of Ghana, and the Centre National de l'Energie, des Sciences et Techniques Nucleaires (CNESTEN) in Morocco.

The EduTA missions for the auditing of the AFRA RDC is an important tool to help the institutions put in place the basic infrastructure (human resources, physical structures, laboratory facilities) to conduct the Postgraduate Educational Course in Radiation Protection and the Safety of Radiation Sources, with participants from all the AFRA Member States. From the appraisal, the RDCs are encouraged to conform to IAEA safety guidance and syllabi for organizing the E&T activities and by so doing, management systems are put in place for the evaluation of activities. Finally, compliance of national legal and regulatory framework for E&T with IAEA Safety Standards is also promoted.

For further information:

Contact: NSRWtraining@iaea.org

Website: <http://goto.iaea.org/EduTA>

Impressum

**Education & Training in Radiation, Transport &
Waste Safety Newsletter No. 5, March 2016**

The Education and Training in Radiation, Transport and Waste Safety Newsletter is prepared by the Division of Radiation, Transport and Waste Safety,
Department of Nuclear Safety and Security

International Atomic Energy Agency
Vienna International Centre, PO Box 100, 1400 Vienna, Austria
Printed by the IAEA in Austria, March 2016

Disclaimer

This newsletter has not been edited by the editorial staff of the IAEA. The views expressed remain the responsibility of the contributors and do not necessarily represent the views of the IAEA or its Member States. The use of particular designations of countries or territories does not imply any judgement by the publisher, the IAEA, as to the legal status of such countries or territories, of their authorities and institutions or of the delimitation of their boundaries.