



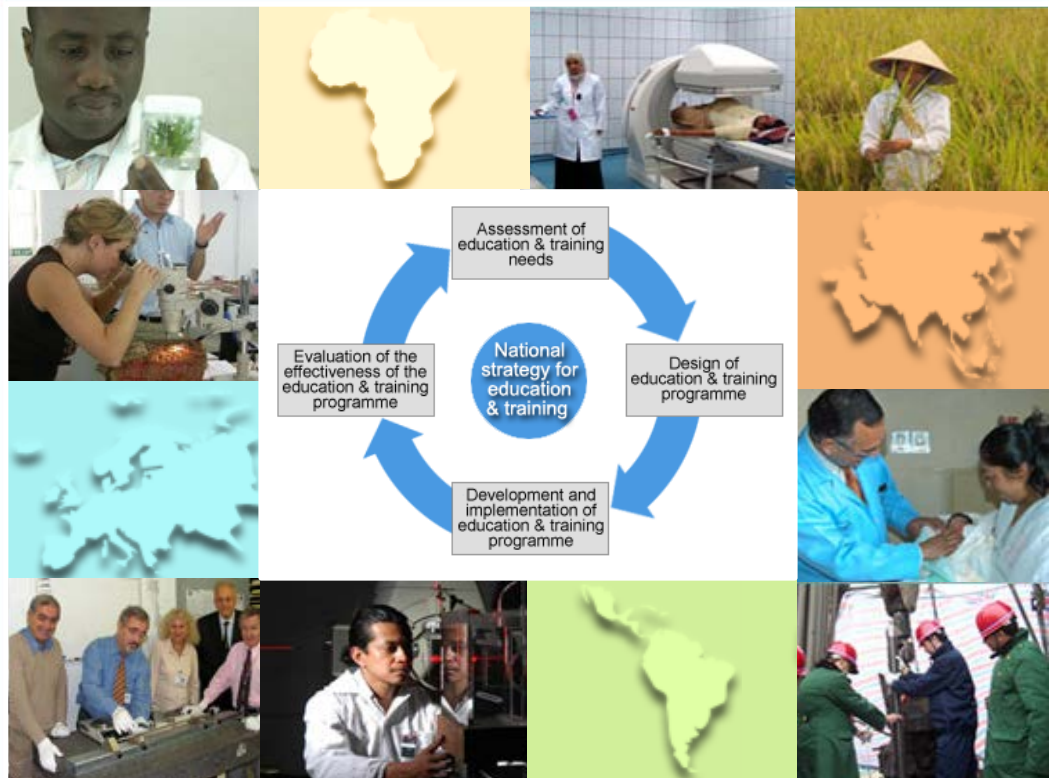
News from the Division of Radiation, Transport and Waste Safety  
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## Focus on Regional Activities

### Assisting Member States to develop National Strategies for Education and Training

IAEA's Division of Radiation, Transport and Waste Safety is assisting Member States to develop **national strategies** for education and training in radiation, transport and waste safety via the regional projects on "Strengthening Education and Training Infrastructure, and Building Competence in Radiation Safety" (RAF/9/04, RAS/9/066, RER/9/109 and RLA/9/070). The regional workshops conducted in 2012 in this area and the results achieved were presented in the previous issues of this newsletter focussing specifically on each region of the Technical Cooperation Programme (**Africa, Asia and the Pacific, Europe** and **Latin America**).

In the course of 2013, a new cycle of **Regional Workshops** was conducted. The workshops held in the regions of Africa, Asia and the Pacific, and Europe mainly focussed on **Sharing Experience and Progress made in establishing a National Strategy for Education and Training in Radiation, Transport and Waste Safety** (pages 2-5). The workshop held in the region of Latin America mainly focussed on **Developing and Implementing Education and Training programmes** (pages 6-7). An **overview** on the results achieved by participating Member States for the period 2012-2013 is provided on page 8.

# Regional Workshops in Africa, Asia and the Pacific, and Europe

IAEA regional workshops on “**Sharing Experience and Progress made in establishing a National Strategy for Education and Training in Radiation, Transport and Waste Safety**” were organized for the African (in French and English), European (in Russian and English), and Asian and the Pacific (in English) regions in 2013. The workshops were supported through the Technical Cooperation projects **RAF/9/048** (Africa), **RAS/9/066** (Asia and the Pacific), and **RER/9/109** (Europe).

## Background

In 2012 workshops were held to provide Member States with a general understanding of the IAEA methodology to establish a national strategy for education and training in radiation, transport and waste safety. The methodology is based on four-interlinked phases ([issue No. 1 of the newsletter](#)), where the outcome of one phase is the starting point for the next phase: identification of the training needs; design of a national training programme; development and implementation of the national training programme; evaluation and feedback.

The 2013 workshops were aimed at monitoring advancements in this area for Member States who attended the previous workshop, and providing an overview on the methodology to other Member States.

## Location, Date, Language

- Algeria, in collaboration with the Commissariat à l'énergie atomique (COMENA); 9-13 June 2013, French;
- Ghana, in collaboration with the Ghana Atomic Energy Commission (GAEC), 10-14 June 2013, English;
- Belarus, in collaboration with the International A. Sakharov Environmental University, 8-12 July 2013, Russian;
- Greece, in collaboration with the Greek Atomic Energy Commission (GAEC), 8-12 July 2013, English;
- Malaysia, in collaboration with the Malaysian Nuclear Agency, 17-20 June 2013, English.

## Purpose

- To share experience and report on progress made by those Member States, who attended the previous workshops held in 2012, on establishing a national strategy for education and training in radiation, transport and waste safety;
- To provide other Member States with a general understanding of the IAEA methodology for establishing a national strategy for education and training in radiation, transport and waste safety, and to collect preliminary information for the development of national strategies, including

regulatory framework for education and training, human resources and training infrastructures in radiation safety;

- To review initiatives taken by Member States in establishing a national strategy, pointing out the challenges faced and the solutions adopted, that could be utilized by other Member States in the region;
- To review and update the information of the radiation safety profile for education and training module (TSA6) in the Radiation Safety Information Management System (**RASIMS**).

## Scope and Nature

The workshops were organized into plenary sessions and working groups. Experts gave presentations and reviewed the work of the breakout groups. The participants gave presentations on:

- Challenges faced, solutions adopted and actions taken to establish a national strategy;
- National regulatory framework for education and training, human resources and training infrastructures in the field of radiation safety.

Participants were asked to bring relevant information (e.g. documents related to actions taken to establish a national strategy, when applicable, national legislation and regulations for education and training in radiation protection and safety), and to contact and put together inputs from all the relevant stakeholders.

The participants were also asked to provide input, review and update information related to TSA6 in RASIMS.

The main reference documents for the workshops were:

- Governmental, Legal and Regulatory Framework for Safety, IAEA General Safety Requirements Part 1, GSR Part 1;
- Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards - Interim Edition, IAEA General Safety Requirements Part 3, GSR Part 3;
- Building Competence in Radiation Protection and the Safe Use of Radiation Sources, IAEA Safety Guide, RS-G-1.4;
- Draft guidance on the IAEA methodology for establishing a national strategy for education and training in radiation, transport and waste safety.

## Participants

In total 84 participants attended the workshops from 62 countries. The lecturers and facilitators were from the IAEA Regional Training Centres in the region (Algeria, Belarus, Ghana, and Morocco), IAEA Member States (Belgium, Lithuania), plus IAEA staff.

**WORKSHOP IN GHANA (ENGLISH)**

**Workshop Facilitators**

Cyril Schandorf (Ghana), Andrea Luciani (IAEA)

**Participants**

	Botswana	CHIMIDZA, Samuel
	Egypt	ELDESOUKY, Wael
	Lesotho	KANONO, Mathapelo Germina
	Mauritius	OLLITE, Faradally Abdoulla
	Sierra Leone	KONGO, Josephus Jibai
	Sudan	MUSA, Isam Salih Mohamed
	Tanzania	BALOBEGWA, Vitus Abel
	Uganda	BYAMUKAMA, Abdul NAKATUDDE, Rebecca
	Zambia	SIWILA, Boster Dearson
	Zimbabwe	CHIPURU, Justice





	Mali	KONE, Nagantié
	Mauritania	DEIDA, Ahmed Bezeid
	Morocco	EL GAMOUSSI, Rachida
	Dem. Rep. of Congo	KAZADI KABUYA, Francois



Fig.2: Group photo from the workshop in Algeria.










Fig.1: Group photo from the workshop in Ghana.

**WORKSHOP IN ALGERIA (FRENCH)**

**Workshop Facilitators**

Abdelmajid Caoui (Morocco), Michèle Coeck (Belgium), Abdelkader Noureddine (Algeria)

Country	Participants
	Algeria ABDENASSER, Ghezal
	Burundi BARANCIRA, Thaddée
	Benin AYELO, Ahoumenou Paul
	Burkina Faso SAM (NÉE ZANGRE), Sidnoma
	Cameroon BEYALA ATEBA, Jean Félix
	Chad ABDRAMANE, Abba Seid OUMAR DJIME, Moussa
	Côte d'Ivoire MONNEHAN, Georges Alain

**WORKSHOP IN GREECE (ENGLISH)**

**Workshop Facilitators**

Panagiotis Dimitriou (Greece), Andrea Luciani (IAEA)

**Participants**

	Albania	GRILLO, Bardhyl PACI, Rustem
	Armenia	BABAYAN, Armen
	Azerbaijan	EYVAZOV, Agil GAHRAMANOVA, Matanat
	Bosnia and Herzegovina	LAGUMDZIJA, Armin
	Bulgaria	GROZDANOV, Krassimir Assenov VASSILEVA, Jenia Nachkova
	Croatia	VEINOVIC, Zelimir
	Hungary	KOVACS, Tibor Janos
	Kazakhstan	ABDYKHALIKOVA, Sholpan
	Lithuania	GATELYTE, Ieva
	The frmr. Yug. Rep. of Macedonia	RISTOVA, Mimoza
	Montenegro	JOVANOVIC, Slobodan
	Moldova	BAHNAREL, Ion BALAN, Ionel Haralambie
	Portugal	NAZARETH FALCAO, Antonio
	Romania	PETRE, Doina TATAR, Florin Constantin




	Serbia	KNEZEVIC, Vuk
	Slovakia	BEDI, Emil
	Turkey	ZEYREK, Celal Tugrul



Fig.3: Group photo from the workshop in Greece.

**WORKSHOP IN BELARUS (RUSSIAN)**

**Workshop Facilitators**

Andrey I. Timoshchenko (Belarus), Julius Ziliukas (Lithuania)

**Participants**

	Armenia	VOSKANYAN, Karen
	Azerbaijan	ASLANOV, Fikrat SHUKUROV, Vahid Elcin
	Belarus	VASILEUSKAYA, Liudmila
	Bulgaria	KAZAKOVA, Svetla Vladimirova SABINOVA, Vera
	Georgia	GIORGEBIANI, Mariam
	Kazakhstan	TOKMAGAMBETOVA, Lazzat
	Kyrgyzstan	DUISHENOVA, Zhyldyz KAZYBAEV, Narynbek
	Latvia	KIZANE, Gunta
	Lithuania	MURZIN, Aleksandr RAGNIS, Rimvydas
	The former Yug. Rep. of Macedonia	JONOVSKI, Jovan
	Moldova	MURSA, Elena HUSTIUC, Victor
	Russian Federation	BOMBIN, Roman
	Serbia	CASIC, Durdija
	Tajikistan	KHAMIDOV, Farkhod SALOMOV, Firdavs
	Uzbekistan	KHALILOV, Anvar



Fig.4: Photograph from the workshop in Belarus.

**WORKSHOP IN MALAYSIA (ENGLISH)**

**Workshop Facilitators**

Panagiotis Dimitriou (Greece), John Wheatley (IAEA)

**Participants**











	Bangladesh	ISLAM, M. Moinul
	Cambodia	HOM, Phaly
	China	WANG, Liming
	Indonesia	RINDAYANI, Kanadiato Rini
	Iraq	SAIHOOD, Asaad
	Jordan	HAMDAN, Ahmad
	Malaysia	CHE NOR ANIZA, Che Zainul Bahri KADER IBRAHIM, Sabariah
	Myanmar	KAY THWE HTUN
	Nepal	PANT, Shanta Devi
	Oman	AL AZRI, Faisal Hamed Mohammed
	Pakistan	REHMAN, Syed Shakeel Ur
	Sri Lanka	DE SILVA, Uththama W. K. Haryantha
	Syria	SHWEIKANI, Riad
	Thailand	SUPARIT, Nitaya
	UAE	MAJALI, Mustafa Moh'D
	Vietnam	NGUYEN, Trung Tinh
	Yemen	AL-SHAMI, Abdullah Ahmed



Fig.5: Photograph from the workshop in Malaysia.

**Workshop summary**

Progress made in establishing the national strategy for education and training was presented and shared by those Member States that attended the workshops in 2012. Challenges faced and difficulties encountered were analysed, in order to identify possible solutions to be rendered to Member States. The radiation safety profile for TSA6 in RASIMS was updated or, for some Member States, drafted for the first time. Discussions were held on how to develop a policy framework for facilitating the establishment of the national

strategy for education training. The development of a simple general template for a policy document to be submitted and endorsed by governmental authorities was considered. Challenges in the completion of the first step of the process to establish the national strategy (analysis of the education and training needs) have been discussed. Both topics have been proposed to be considered in the future workshops.

Ways for IAEA to better assist Member States were discussed. The conduction of IAEA expert missions in Member States was identified as an appropriate and effective way to get the involvement of all the concerned national stakeholders and to provide advice on how to initiate the establishment of the national strategy for education and training.

During the workshop, all the participants applied the draft IAEA guidance on how to establish a national strategy for education and training, and drafted, as an exercise, a Work Plan according to the Annex II of the guidance: they identified the relevant national stakeholders and clarified their role and duties in regard to the establishment of the national strategy; the actions expected to be completed; and the time frame. In Figure 6 the general template for the development of the Work Plan, as provided in Annex II of the IAEA draft guidance, is presented.

Stakeholders	Policy framework	Output 1: National strategy for education and training established	Assessment of education and training needs	Output 2: Education and training needs assessed	Design of the national E&T programme	Output 3: Schedule of activities to meet the education and training needs	Development and implementation of the national E&T programme	Output 4: Competence built in support of national radiation, transport and waste infrastructures	Evaluation of the national E&T programme	Output 5: national education and training programme continuous to be effective and up to date
Government	☑		☑				☑			
Regulatory body	☑		☑				☑			
Professional organizations			☑				☑			
Technical supporting organizations, Service providers	☑		☑							
Education and training providers	☑		☑		☑		☑			
High-Level Steering Committee	☑		☑		☑		☑		☑	
Technical Working Groups	☑		☑		☑		☑		☑	

Fig.6: Work Plan to establish a national strategy for education and training in radiation, transport and waste safety: relevant stakeholders and their involvement in each step of the process to establish the national strategy.

# Regional Workshop in Latin America

The IAEA regional workshop on “**Developing and Implementing Education and Training programmes**” was organized for the Latin-American region (in Spanish) in 2013. The workshop was supported through the Technical Cooperation project **RLA/9/070**.

## Background

Member States in the Latin-American region already started working on the establishment of the national strategy for education and training in the previous cycle of the Technical Cooperation programme. Therefore, the format and scope of the workshops held in Latin America were different from those organized in the other regions.

In 2012 a workshop was held in Bolivia to familiarize Member States with the first step in the process to establish a national strategy for education and training in radiation, transport and waste safety, i.e. the analysis of the education and training needs.

The 2013 workshop was aimed at continuing the exercise of application of the IAEA draft guidance for the establishment of a national strategy for education and training in radiation, transport and waste safety: development of a policy; completion of the second and third step in the process for the establishment of the national strategy (i.e. design, and development and implementation of the national education and training programme), (Figure 7).

## Location, Date, Language

- Cuba, in collaboration with the Centro de Protección e Higiene de las Radiaciones (CPHR), 8-12 July 2013, Spanish.

## Purpose

- To analyse the national context in which a national education and training program in radiation protection has to be developed;

- To identify the relevant elements in the preparation of the national education and training program;
- To practice with the design and development of the national education and training program;
- To identify indicators to assess the effectiveness of national education and training programs.
- To review and update the information of the radiation safety profile for education and training module (TSA6) in the Radiation Safety Information Management System (**RASIMS**).

## Scope and Nature

The workshop was organized into plenary sessions and working groups. Experts gave presentations and reviewed the work of the breakout groups. The participants gave presentations on status of the establishment of the National Strategy for education and training in radiation, transport and waste safety. The participants were asked:

- To prepare a draft template of a policy document providing the general framework for the establishment of the national strategy for education and training in radiation, transport and waste safety;
- To learn from the experience of Member States that already completed some steps in the process for establishing a national strategy;
- To design the national education and training programme for a country case-study (second step of the process);
- To develop and implement the national education and training programme for a country case-study (third step of the process).

The participants were also expected to provide input to update information related to TSA6 in RASIMS.

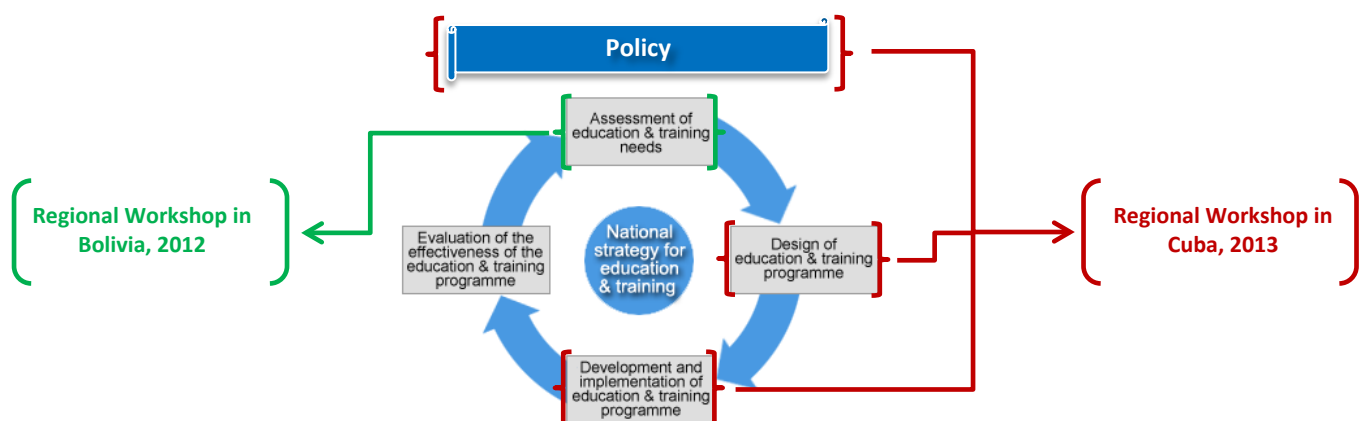


Fig.7: Tasks completed during the regional workshop held in Cuba in 2013 (as continuation of the regional workshop held in Bolivia in 2012).


The main reference documents for the workshops were:

- Governmental, Legal and Regulatory Framework for Safety, IAEA General Safety Requirements Part 1, GSR Part 1;
- Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards - Interim Edition, IAEA General Safety Requirements Part 3, GSR Part 3;
- Building Competence in Radiation Protection and the Safe Use of Radiation Sources, IAEA Safety Guide, RS-G-1.4;
- Draft guidance on the IAEA methodology for establishing a national strategy for education and training in radiation, transport and waste safety.

**Participants**

In total 16 participants attended the workshops from 12 countries.

**WORKSHOP IN CUBA (SPANISH)**

<b>Workshop Facilitator</b>	
Ronald Enrique Pacheco Jimenez (IAEA)	
<b>Participants</b>	
	Bolivia MIRANDA CUADROS, Alberto Augusto
	Brazil ROCHA FERREIRA, Paulo Roberto
	Chile VILLALOBOS PINO, Belgica
	Costa Rica MADRIGAL DIAZ, Carlos Manuel
	Cuba CÁRDENAS HERRERA, Juan GUILLEN CAMPOS, Alba HERNÁNDEZ SAIZ, Alejandro RODRIGUEZ RODRIGUEZ, Maidelys Rosa TOMÁS ZERQUERA, Juan
	Dominican Republic FERREIRA CAPELLÁN, José Miguel
	Ecuador VILLALBA BARRERA, Fernando Patricio
	Mexico JIMÉNEZ ROJAS, Mardonio
	Paraguay VILLANUEVA DE DÍAZ, Zulma Stella
	Peru MEDINA FLORES, Edgard Edilfio
	Uruguay CABRAL MOLINA, Walter Sergio
	Venezuela GIRÓN SÁNCHEZ, Carmen Matilde

**Workshop summary**

Progress made in establishing the national strategy for education and training were presented and shared by those Member States that attended the workshops in 2012. On the basis of the analysis of the education and training needs carried out in 2012, the participants designed the national education and training programme, following the methodology provided in the IAEA draft guidance for the establishment of the national strategy for

education and training in radiation, transport and waste safety.

**NATIONAL EDUCATION AND TRAINING PROGRAMME**  
The schedule of activities to be delivered over a specified timeframe in order to meet the identified education and training needs.

Considering the information collected in preparation of the workshop, about the available national capabilities for a specific country taken as case-study (in terms of the physical infrastructures and human resources), the participants proceeded with the development and implementation of the national education and training programme.

The Work Plans drafted during the workshop held in Bolivia in 2012 (similarly to the work completed during the workshops in the other regions in 2013) were updated. Performance indicators were also discussed and agreed to monitor the completion of each action within the Work Plan.

Finally, the radiation safety profiles for TSA6 were updated using a template developed in word, to be successively uploaded in RASIMS.



Fig.8: Group photo from the workshop in Cuba.



Fig.9: Participants working in group during the workshop in Cuba.

# Overview of achievements (2012 – 2013)

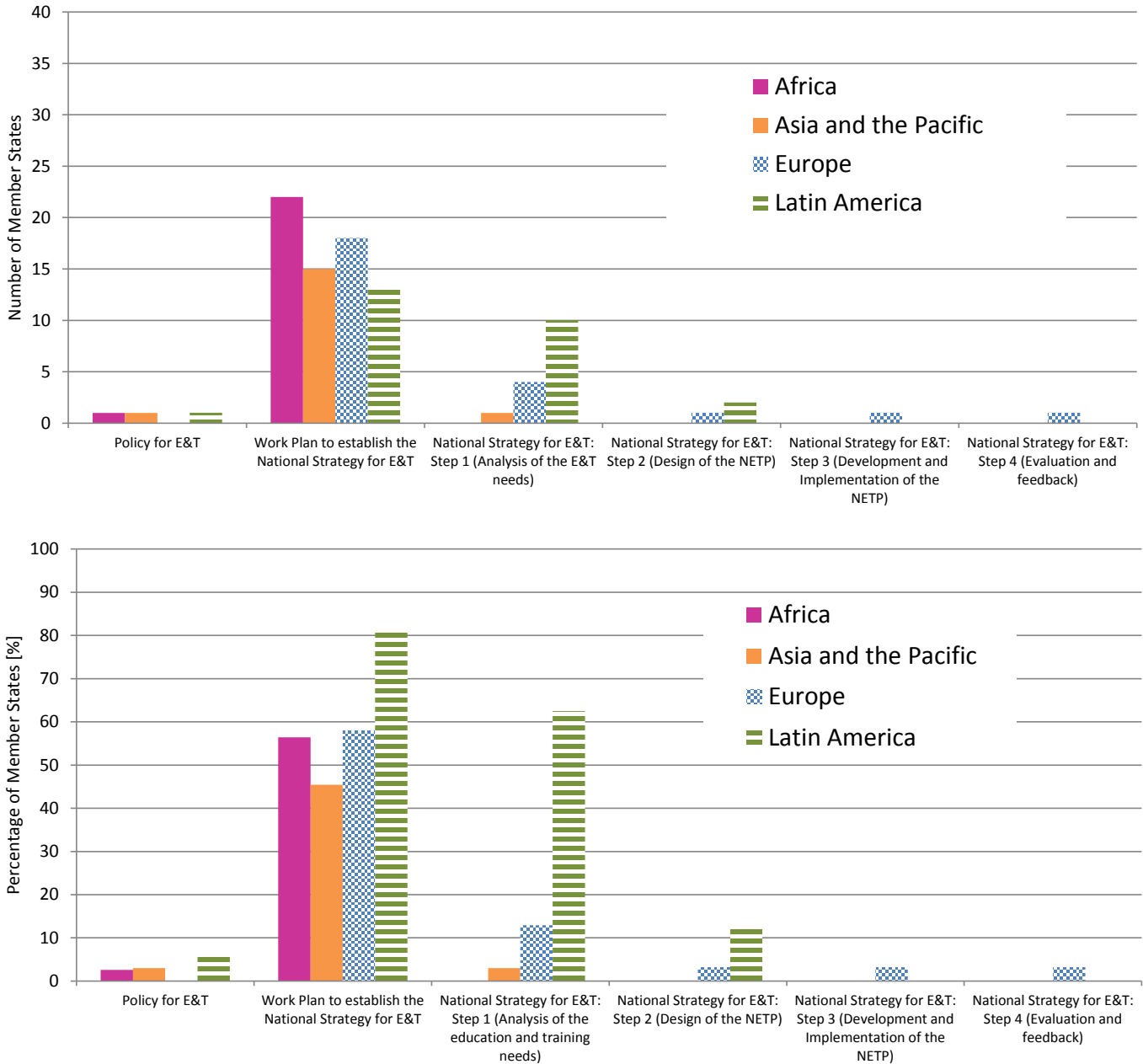


Fig.10: Number (on the top) and percentage (on the bottom) of Member States in each region, that drafted documents (policy, work plans) and completed the steps to establish a National Strategy for E&T in radiation, transport and waste safety (E&T: education and training; NETP: national education and training programme).

## Impressum

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