



IAEA

International Atomic Energy Agency

Atoms for Peace and Development

**DEPARTMENT OF NUCLEAR SAFETY AND SECURITY
DIVISION OF RADIATION, TRANSPORT AND WASTE SAFETY**



**EDUCATION AND TRAINING APPRAISAL
IN RADIATION PROTECTION AND THE SAFETY OF RADIATION SOURCES
ZAMBIA**

13 to 17 May 2019

APPRAISAL TEAM - PARTICIPANTS

Appraisal Team

Augustine Faanu	Ghana (team leader, expert)
Julio Barceló	Spain (expert)
Andrea Luciani	IAEA (team coordinator – pre- and post- mission activities)

List of Participants

RPA

Mr Boster Dearson Siwila	Executive Director
Mr Kabuku Mushaukwa	Director of Protection Services
Mr. Miyombo Ernest Miyombo	Radiation Safety Officer
Mr. Dingiswayo Makukula	Radiation Safety Officer
Mr. Tekana Sichone	Senior Human Resources & Administrative Officer
Mr. Anthony Siamulonga	Radiation Safety Officer

Ministry of Higher Education

Mr. Paul Moewe	NLA/NEPIO
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Health Professions Council of Zambia (HPCZ)

Dr. Muchenelah Chibasa	Assistant Registrar training
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Evelyn Hone College

Mr. Daniel Fwambo	Principal
Dr. Foster Munsanje	Head of School of Applied and Health Sciences
Mr. Boniface Mulenga	Section Head
Mr. Brian Loloji	Section Head
Mr. Edward Mwansa	Section Head
Mr. John K Willberforce	Senior Lecturer
Mr. Kelvin Chitamya	Lecturer

University of Zambia

Mr. Gershom Chishimba	Lecturer Department of Physics
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Cancer Diseases Hospital

Dr. Lewis Banda	Senior Medical Superintendent
Ms. Barbara M'Ule	Medical Physicist
Mr. Harry Munkumpa	Chief Radiotherapist

BACKGROUND

In October 2018 the executive director of the Radiation Protection Authority (RPA, the regulatory body), Mr Boster Dearson Siwila, sent a letter to Mr Peter Johnston, Director of the IAEA Division of Radiation, Transport and Waste Safety, requesting to carry out an Education and Training Appraisal mission in radiation protection and the safety of radiation sources (EduTA).

After some preliminary contacts between the Zambian counterpart and the IAEA contact point for the mission, the questionnaire was sent out to RPA with the request to fill out the core modules (Modules A on the legal and regulatory framework for education and training, Module B on the national strategy for education and training). The questionnaire with the responses and supporting documents was sent back to the IAEA contact point for a preliminary assessment prior to the mission being carried out. The IAEA contact point provided the RPA with some preliminary remarks on how to amend the information provided and the supporting documents in order to properly address some of the questions. A new completed questionnaire with additional supporting documents was sent back to the IAEA contact point: this version was shared with the EduTA team that requested the Zambian counterpart to provide some clarifications before the mission.

The EduTA mission was conducted from 13 to 17 May 2019 under the IAEA Technical Cooperation project ZAM/9/011 "Strengthening National Regulatory Infrastructure for Radiation Safety".

OBJECTIVES AND TERMS OF REFERENCE OF THE EduTA MISSION

The general objectives of the EduTA are:

- To carry out a detailed appraisal of the status of the provisions for education and training in radiation protection and the safety of radiation sources;
- 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 the host Member State with recommendations and suggestions for improvement;
- 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 with the EduTA team members who have experience in the issues at stake;
- To promote the IAEA Safety Standards and Guides relevant to the scope of the appraisal.

In this framework, the terms of reference of this appraisal mission were:

- To review, together with the counterpart, the information provided in Module A and B of the EduTA questionnaire on the legal and regulatory framework for education and training in radiation protection and safety, and the national strategy for education and training;
- To provide an opportunity to continuously improve the provisions and overall infrastructure for education and training in radiation protection and safety.

CONDUCT OF THE MISSION

The EduTA mission was conducted according to the agreed mission programme. Representatives from different national stakeholders were met during the mission. The opening session took place on the first day of the mission at the RPA premises. The EduTA team was welcomed by Mr Kabuku Mushaukwa, Director of Protection Services RPA, Mr Miyombo Ernest Miyombo, Radiation Safety Officer of RPA, and other RPA managers and staff.

Mr Miyombo briefed the EduTA team on the regulatory framework of Zambia and the activities and structure of RPA. Dr. Foster Munsanje, Head of the School of Applied and Health Sciences of Evelyn Hone College highlighted the training provided by the school, especially in the medical sector. Mr. Gershom Chishimba, lecturer from the Department of Physics University of Zambia, explained the situation of radiation protection training in the

university degrees and provided an overview of the training provided. Ms. Barbara M’Ule from the Cancer Diseases Hospital presented the training provided to the specialist in radiotherapy and radiation oncology. Mr. Paul Moewe from the Ministry of Higher Education presented the future training courses and the policy for radiation protection training. Finally, Dr. Muchenelah Chibasa from the HPCZ explained the registration process for all health professionals and the training accredited.

After the presentations, and during the week, the information provided to the EduTA team by the RPA counterparts prior to the mission was discussed in detail. Clarification on aspects of the questionnaire was provided and additional information was requested where necessary. Additional documents and evidence were provided to the EduTA team.

In accordance with the mission programme, the EduTA team also visited several organizations and institutions relevant to the scope of the mission:

- Evelyn Hone College;
- Cancer Diseases Hospital;
- Department of Physics of the University of Zambia.

On the last day, an exit meeting was held with the RPA counterpart. The EduTA team leader presented a brief outcome of the assessment. Conclusions, recommendations and suggestions were agreed with the counterpart. An action plan was agreed upon subsequent to the completion of the mission, identifying the responsible organizations and the time frame for addressing the recommendations.