

# 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

## **KENYA**

3 to 7 June 2019

#### **APPRAISAL TEAM - PARTICIPANTS**

#### **Appraisal Team**

Augustine Faanu Ghana (team leader, expert)

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#### **List of Participants**

#### National Commission for Science, Technology and Innovation (NACOSTI)

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#### **Christian Health Association of Kenya**

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#### **BACKGROUND**

In September 2018 the director general of the National Commission for Science Technology and Innovation (NACOSTI), Mr Moses K. Rugutt, 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 Kenyan counterpart and the IAEA contact point for the mission, the questionnaire was sent out to NACOSTI 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), and encouraging to fill out the additional module as well (Part C on the provisions for the PGEC), in order to provide information on national initiatives to build competence at postgraduate level in the field of radiation protection and safety.

A preliminary questionnaire with the responses and supporting documents was sent back to the IAEA contact point in October 2018 for a first assessment. The IAEA contact point provided the Kenyan counterpart 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 in February 2019: this version was shared with the EduTA team that requested the Kenyan counterpart to provide some clarifications before the mission.

The EduTA mission was conducted from 3 to 7 June 2019 under the IAEA Technical Cooperation project RAF/9/058 "Strengthening Education and Training in Radiation Safety and Sustaining Human Resources Development and Nuclear Knowledge Management (AFRA)".

#### 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 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, B and C of the EduTA questionnaire on the legal and regulatory framework for education and training in radiation protection and safety, the national strategy for education and training, and the provisions for postgraduate 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 National Commission for Science, Technology and Innovation (NACOSTI) premises. The EduTA team was welcomed by Dr. Moses K. Rugutt, Director General of NACOSTI and his staff.

Mr. David Otwoma, Chief Analyst of NACOSTI, introduced the EduTA mission and, as an AFRA National Coordinator, presented the projects of the AFRA programme. Prof. Michael J. Gatari from the Institute of Nuclear Science and Technology, University of Nairobi presented the Education and Training in Radiation Protection offered by the Institute. Prof. J. M. Mwabora from the Department of Physics, University of Nairobi explained the experience of the university in education and training assessment. Dr. Nadir O. Hashim, Chairman of the Department of Physics. Kenyatta University presented the nuclear education and training offered by KU. Ms. Pamella Kageliza Kilavi from the Department of Physics and Space Science, Technical University of Kenya made a presentation introducing the university. Finally, Mr. Joe Mwangi from the Nuclear Power and Energy Agency exposed the HRD policy and strategy approach for the nuclear programme.

After the presentations, and during the week, the information provided to the EduTA team by the NACOSTI counterparts prior to the mission was discussed in detail. Clarification on aspects of the questionnaire was provided and additional information was requested where necessary. Special mention to the meeting with the Radiation Protection Board (RPB) where a clear explanation of the regulatory framework was given, and additional information was received. 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:

- TUK Technical University of Kenya.
- RPB Radiation protection Board.
- UoN University of Nairobi (Institute of Nuclear Science and Technology; Department of Physics)
- KU Kenyatta University
- NuPEA Nuclear Power and Energy Agency

On the last day, an exit meeting was held with all the counterparts. The EduTA team leader presented a brief outcome of the assessment. Conclusions, recommendations and suggestions were agreed upon 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.