### ABSTRACT

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# EDUCATION AND TRAINING APPRAISAL IN RADIATION PROTECTION AND SAFETY (EduTA)

## MISSION TO NIGERIA

10 – 14 October 2022 DEPARTMENT OF NUCLEAR SAFETY AND SECURITY DIVISION OF RADIATION, TRANSPORT AND WASTE SAFETY



Education and Training Appraisal in Radiation Protection and Safety

EduTA



The EduTA Team and the Nigerian Counterparts

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

#### Appraisal Team

Mr Augustine Faanu	Ghana (team leader, expert)
Mr. Isaac Mundia	Kenya (expert)
Mr. Andrea Luciani	IAEA (team coordinator)

#### List of Participants

Name	Designation	Organization
Dr. Ya'u Idris	Director General	NNRA
Dr. Isa Sambo	General Manager	NNRA
Mrs. Hassatu Sirika	Deputy General Manager	NNRA
Dr. Oyeyemi S. M.	Ag. Head, NIRPR	NNRA
Mr Abubakar B. Bashir	Manager	NNRA
Mr.Tanko Yusuf B	Manager	NNRA
Mr. Mfon C. Ebong	Deputy Manager	NNRA
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Mr. Muhammad B. Gusau	Assistant Manager	NNRA
Mr. Amofuokhai Andrew	Principal Technical Officer	NNRA
Mr. Akinseye G. Kingsley	Senior ICT Officer	NNRA
Mrs. Honesty Eyoanwan	Regulatory Officer II	NNRA
Mrs. Annah Ibrahim	Information Officer	NNRA
Prof. D. J. Adeyemo	Chief Rad. Protection Off.	Ahmadu Bello University
Prof. Nnamdi N.Jibiri	HOD Physics	University of Ibadan
Mr. Bashir M. Liman	Ag.D(NE)	ECN
Mr. Ibrahim Idakwo	PSO	ECN
Mr. Umar Adamu Umar	Asst Chief Sci. Officer	ECN
Mr. Yusuf O. Hassan	CEO(Upstream)	MPR
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Mr. Abdulmalik Ismaila	Principal Scientific Officer	NAEC

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#### BACKGROUND

In October 2019 the Nigerian Nuclear Regulatory Authority (NNRA) contacted the IAEA Division of Radiation, Transport and Waste Safety to request a mission to carry out an Education and Training Appraisal in radiation protection and safety (EduTA). The aim of the mission was to appraise the status of national provisions and infrastructure for education and training in radiation protection and safety, to identify possible ways of improvement to meet IAEA safety standards and to effectively address the national education and training needs.

Due to travel restrictions as a result of the COVID-19 pandemic, the Secretariat and the Nigerian counterpart agreed to postpone the initially planned mission and to develop a mission programme split in two phases.

The first phase of the appraisal was conducted virtually in August 2021. The questionnaire was sent out to NNRA with the request to fill out the core modules (Module A on the legal and regulatory framework for education and training, and Module B on the national strategy for education and training). Although Nigeria does not host a PGEC under the auspices of the IAEA, it was encouraged to fill out the additional module as well (Module C on the provisions for the PGEC), in order to collect information on national initiatives to build competence at postgraduate level in the field of radiation protection and safety. The appraisal mainly focused on the establishment of the requirements, particularly for personnel with responsibilities in radiation protection and safety (Qualified Experts and Radiation Protection Officers). It also provided the opportunity for the Secretariat to give advice for the establishment of the national strategy on education and training in the area.

The second phase the EduTA mission was carried out in person from 10 to 14 October 2022, with the aim of completing the appraisal conducted virtually in 2021, in line with the objectives of the EduTA mission.

The first phase of the EduTA mission was supported through the IAEA Technical Cooperation project NIR/2/009. The second phase of the EduTA mission was supported through the IAEA Technical Cooperation project RAF/0/055.

#### 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 second day of the mission at the NNRA premises. The EduTA team was welcomed by Dr. Yau Idris, Director General of NNRA, representatives of different stakeholders and some senior management staff NNRA. The opening session, scheduled to take place on the first day of the mission was rescheduled to the second day because it was a National Holiday in Nigeria. In view of that, the activities planned for Monday were rescheduled to Tuesday whilst those of Tuesday were done on Monday.

At the opening, Dr. Yau Edris, welcomed members and highlighted the importance of the mission and the need for participants to ensure their commitment so that the evaluation of the Nigerian education and training infrastructure by the EduTA mission would yield the desired outcome. This was followed by a presentation by the EduTA team leader on the objectives and scope of the mission. A review of the questionnaire was done with NNRA staff and the various stakeholders who completed it, to seek clarification on some of the issues identified in Phase I of the mission in 2021.

There were presentations from relevant participating institutions in relation to the national initiatives and capabilities of academic institutions to provide courses or programmes in radiation protection.

Prof Nnamdi Norbert Jibiri, a Professor in Health Physics and Radiation Protection and also the Head of Department Physics at the University of Ibadan, provided an overview of the two professional courses being offered in radiation for the Postgraduate Diploma in Radiation Protection (PGDRP) and Masters in Radiation Protection (MRP). These courses are being offered in collaboration with the National Institute of Radiation Protection and Research (NIRPR) of NNRA through an established MoU. This is currently the only university providing postgraduate education and training of Radiation Safety Advisers in Nigeria.

Dr. Samuel Oyeyemi, Director of NIRPR provided details on the curriculum and the overall framework in the training of RSOs in Nigeria. It also came to light that, the NIRPR is the only accredited body providing training for RSOs.

Finally, Prof. Adeyemo gave a presentation on the postgraduate programs in radiation biophysics and nuclear physics offered by Ahmadu Bello University, and also spoke about plans to start a postgraduate certificate course in radiation protection.

All the information from the presentations and further documents provided by NNRA counterpart and other stakeholders, as well as the discussion during the week, were used by EduTA team to help clarify issues that were still pending after the completion of the phase I of the mission.

The stakeholders who met with the EduTA team and helped provide additional information to enrich the discussion were:

- NNRA,
- National Institute of Radiation Protection and Research (NIRPR),
- Ministry of Petroleum Resources (MPR),
- Energy Commission of Nigeria (ECN),
- Center Energy Research and Training (CERT) of Ahmadu Bello University,
- Department of Physics, University of Ibadan (UI),
- Nigeria Atomic Energy Commission (NAEC).

A planned visit to NAEC did not materialize because the chairman was out on other assignment.

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