



IAEA

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Atoms for Peace

DIVISION OF RADIATION TRANSPORT AND WASTE SAFETY



EduTA

EDUCATION AND TRAINING APPRAISAL MISSION

IN

GHANA

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COMPOSITION OF THE IAEA APPRAISAL TEAM

1. Geetha Sadagopan, Team Coordinator, IAEA
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PERSONS MET DURING THE APPRAISAL MISSION

Name	Designation
Hon. Elizabeth Ohene	Minister of State for Education, Science & Sports, Ghana
Prof. F.K Rodrigues	Dean, Faculty of Science, University of Ghana
Prof. E.H.K. Akaho	DG, GAEC
Prof. Y. Serfor –Armah	DDG, GAEC
Prof. J.H. Amuasi	Coordinator of SNAS
Prof. Cyril Schandorf	Head, Dept. of Nuclear Safety & Security, SNAS
Prof. J.J. Fletcher	Head, Dept. Nuclear Science and Applications
Prof .G. Y. Klu	Head, Dept. of Nuclear Agriculture & radiation Processing
Prof. Victoria Appiah	Coordinator, Radiation Processing Programme
Prof. G. Emi-Reynolds	Director, RPB/RPI
Prof. P.O. Yeboah	Coordinator, Nuclear Environmental Protection Programme
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Dr. B.J.B Nyarko	Director, NNRI
Dr Shiloh Osae	Head, Chemistry Department, NNRI
Mr O.C Oppong	Head, SSNTD Lab
Dr. Kwame Danso	Head, NDT Lab
Dr. S.Y. Opoku	Chief Radiotherapist, Korle Bu Teaching Hospital
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Mr. K. Nani	Medical Physicist, Korle Bu Teaching Hospital, Radiotherapy Centre

Mrs. Adjoa Eshun	Nuclear Medicine Technologist
Mr. K. Ampofo	Radiographer, Radiology Department
Mr. S.O. Aniagyei	Manager Nick TC Scan Ltd., Korle Bu Teaching Hospital

BACKGROUND

In a letter to the Secretariat, Ghana Atomic Energy Commission (GAEC) expressed willingness to host IAEA Postgraduate educational course in radiation protection and safety of radiation sources (PGEC). Ghana was informed of the recommendation of the IAEA Steering Committee for education and training, requiring a detailed appraisal of the national training centre prior to its recognition as a regional training centre. GAEC then requested a formal appraisal of the radiation protection education programme at the School of Nuclear and allied Sciences SNAS to qualify as a future Regional Training Center of IAEA, to cover the national needs as well as to contribute towards meeting the existing needs of the African English speaking countries.

An EduTA mission was organized from 14-18 April with two external experts and an IAEA Technical Officer in collaboration with GAEC and SNAS.

The existing legislation governing the use and control of radiation sources in Ghana, established GAEC as a promoter of peaceful uses of Atomic Energy and the Radiation Protection Board (RPB) as the regulatory authority. The licensing and the regulatory control of all types of practices including nuclear installations are assigned to the RPB. The RPB has recently developed with the support of the IAEA projects, numerous guidance and supporting documents, such as, codes of practice, guides and relevant documents. The Provisional National Defense Council Law (Law 308) of 1993 established the Radiation Protection Board (RPB) to carry out its function as a regulatory body. The National Nuclear Research Institute (NNRI) was created to promote the research and development in nuclear applications in 1972 including the development of a nuclear research reactor programme. The Radiation Protection Institute (RPI), created in 2000 acts as a Technical Service Organization (TSO) of RPB.

The School of Nuclear and allied Sciences (SNAS) was established in 2006 under the responsibility of the University of Ghana, within a joint agreement between GAEC and University of Ghana, to deliver inter alia education programmes in radiation protection and other educational disciplines.

The principal Agency publications used as a basis for the appraisal were:

- The Education and Training Appraisal in Radiation Protection and the Safety of Radiation Sources (EduTA) (Working Material July 2005);
- The International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources (SS No. 115);
- The Safety Guide, Building Competence in Radiation Protection and the Safe Use of Radioactive Sources (RS-G-1.4);
- Safety Report, Training in Radiation Protection and the Safe Use of Radioactive Sources (SRS-20);
- Standard Syllabus Postgraduate Educational Course in Radiation Protection and then Safety of Radiation Sources (Training Course Series 18);
- Draft Syllabus for the Training of Radiation Protection Officers.

TERMS OF REFERENCE OF THE APPRAISAL

The terms of reference for this appraisal were:

- To carry out a detailed appraisal of the status of the provision for education and training in radiation protection, including:
 - legislative and regulatory framework with particular reference to education and training;
 - guidance material relevant to education and training;
 - the national training programme in radiation safety or similar document;
 - approved /accredited training course providers /centers and /accredited training courses, if approval/accreditation procedures/systems exist;
 - annual reports from accredited training course providers/centers; recognition/approval/accreditation procedures for education and training providers;
 - courses held in the past calendar year and the numbers of participants attending;
 - list of education and training events planned;
 - the facilities used for educational and training programmes;
 - Available human resource and national lecturers.
- To assess the education programme of Ghana delivered at the Post-graduate School of Nuclear and Allied Sciences, University of Ghana;
- To develop an Action Plan, together with the counterparts, to address deficiencies if any identified during the assessment.

CONDUCT OF THE APPRAISAL

The first step in the appraisal was the completion of a preliminary questionnaire by GAEC covering inter alia:

- Country information;
- Regulatory guidance documents;
- Number of facilities and devices;
- Existing regulatory provisions for education and training;
- Information on the existing qualified personnel and other occupationally exposed.

The coordinator of the SNAS, Prof. J.H. Amuasi welcomed the EduTA team and gave an overview of the SNAS activities and expressed his interest to host IAEA PGEC. He also provided the structure of GAEC and the other supporting organisations within GAEC.

The EduTA team briefed the hosts on the IAEA strategic plan for education and training, IAEA's interest to identify new regional training centres, the objectives of the mission and the procedure for the conduct of the mission.

The appraisal was based on the Education and Training Appraisal in Radiation Protection and the Safety of Radiation Sources (EduTA) -Working material July 2005.

The pre-appraisal information provided to the team was discussed in detail and additional information was requested where required. During the mission, numerous documents were provided to the team.

During the week the EduTA team continued discussions with the host group and visited facilities/laboratories at the RPI and NNRI at the GAEC campus. The EduTA team met with the potential lecturers at the Korle Bu teaching Hospital and also evaluated the facility for possible PGEC project work. A visit to the recently installed scanner systems at the Tema Harbour was interesting. A meeting was arranged with the Minister of State for Education and Sciences, Youth and Sport by the DG of GAEC. The team met the Dean of the SNAS and visited the SNAS facilities.

An exit meeting was held at SNAS with the management of GAEC and SNAS to present the Appraisal Team's preliminary conclusions. The recommendations and the action plan were agreed with the local counterpart.

A full technical report with the findings, recommendations and a work plan was provided to the mission's counterpart and the national authorities.