# Role of certification within a national security framework

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#### Ghana in Brief

Population: 28.21 million (2016)

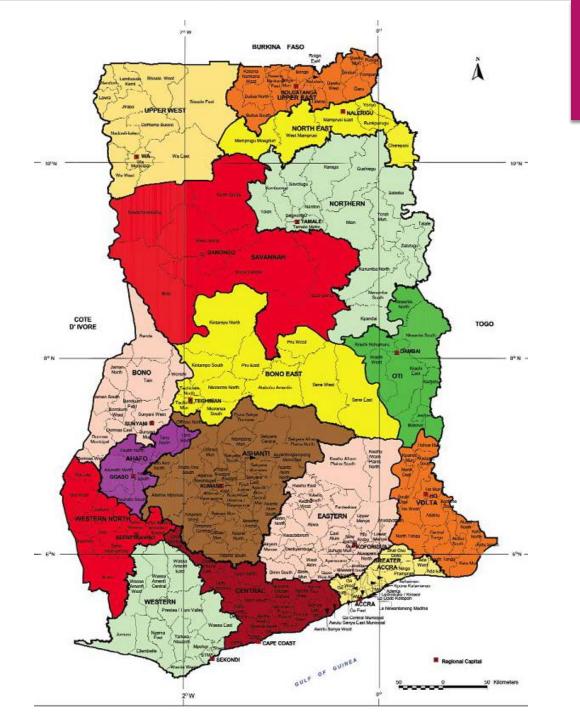
GNI per capita: 4,150 PPP dollars (2016)

Life expectancy: 61.49 years (2015)

Population growth rate: 2.2% annual change (2016)

Fertility rate: 4.12 births per woman (2015) world bank

Official language: English



#### **About the Ghana Atomic Energy Commission**

- The Ghana Atomic Energy Commission was established by an Act of Parliament, Act 204 of 1963, as the sole Agency in Ghana responsible for all matters relating to peaceful uses of atomic energy.
- The Act (204) was amended in 1993 by PNDC Law 308 mainly to enable the creation of other institutes. The founding Act (204) of 1963 has been superseded by Act 588 of 2000 to make provision for GAEC to undertake the commercialization of its research and development results.
- The Commission in executing its CSP 2017-2021 had undergone some structural transformation culminating in the establishment of the Nuclear Power Institute (NPI) for facilitating the introduction of the nuclear power into Ghana's energy mix and other infrastructural expansion taking place at the Commission are clear indication of the outcome of planning culture being inculcated at GAEC.

#### **Institutes under the Commission**

- 1. National Nuclear Research Institute
- 2. Radiation Protection Institute
- 3. Radiological and Material Sciences Research Institute
- 4. Ghana Space Science and Technology Institute
- 5. School of Nuclear and Allied Sciences
- 6. Biotechnology and Nuclear Agricultural Research Institute
- 7. Nuclear Power Institute
- 8. The Head office which comprises- Security Section and other core departments e.g. Human Resources, Accounts, Audits etc.

#### **Facilities at GAEC**

- Radioactive Waste Management Centre for Radioactive Waste Storage
- Ghana Research Reactor (GHAR-1) now with Low Enriched Uranium
- Ion Beam Accelerator Facility
- Secondary Standard Dosimetry Laboratory
- Various laboratories using Nuclear Technique in Research and Development

## **Nuclear Security in Ghana**

- Ghana has adopted a multi-stake holder approach at the national level to manage its nuclear security.
- The structure consist of the National Security Council: responsible for providing support from the seat of government during Nuclear Emergencies events
- The Nuclear security committee primarily responsible for coordinating nuclear security activities in Ghana.
- The Composition of the committee include, NRA, GAEC, RPI, NNRI, Ghana Armed Force, Ghana Police Service, Customs, National Security and BNI. The committee is a Strategic level committee and meet regular to upraise itself with threat and security levels in the country.
- The committee reports directly to National Security Secretariat under the office of the President of Ghana.

## Regulatory Requirements for Nuclear Security in Ghana

- In 2015, the parliament of Ghana passed Act 895. This Act revoked the Radiation Protection Instrument, LI 1559 which established the Radiation Protection Board under the GAEC by PNDCL 308 in 1993 and established a new Nuclear Regulatory Authority (NRA) as the statutory nuclear regulatory authority in Ghana independent of GAEC
- The Nuclear Regulatory Authority currently has draft Regulation for Nuclear Security and Security of Material during Transport.
- These documents prescribe the requirements for security for material in use, storage and transport.
- It also prescribes human resource competencies for the management of radioactive and nuclear materials including professional certifications for security management and persons responsible for security of radioactive materials

## Security Management at GAEC

- As a critical facility, GAEC's security is managed by National Security and GAEC's own internal Security. The Ghana Police Service provide response to GAEC security incidence.
- GAEC currently is in the process of completing its draft Security Plan as part of the requirements of the NRA.
- The plan is a comprehensive document that will be used to manage security at the Ghana atomic Energy Commission and includes requirement for human resource development and competency management, information security, physical protection etc.
- The Plan also prescribe the position of a Security Manager and the requirements to occupy this position including professional certification from recognized institution likes ASIS, WINS etc.

## Training and Competency Development in Nuclear Security

GAEC in collaboration with the University of Ghana, Legon has established the School of Nuclear and Allied Sciences (SNAS). The school runs Post Graduate and Diploma programmes in the various fields of nuclear science including radiation protection, nuclear security and radioactive waste management. The school is an IAEA African Regional Designated Centre (RDC) for professional Training and Higher Education in Nuclear Science and Technology

Ghana continues to collaborate with other CSO and international agencies to build competencies in Nuclear Security for staff and institution responsible for the security of radioactive sources within its jurisdiction including;

- International Atomic Energy Agency
- African Centre for Science and International Security (AFRICSIS)
- Department of Energy United States of America
- WINS etc

## The WINS Approach

WINS approach to security management is that of strategic and performance based and not only on prescriptive rules like in the usual military command or gate manning (Yes Sir!)

Security now involves all in the organization - Human Resources inclusive from the board of directors to the departmental assistant or even cleaner.

No need for excessive secrecy or "classified information" however a well-defined security governance - in terms of structure, rules and responsibilities.

## My Current Roles

- To ensure the implementation of an efficient and effective Human Resource Management Information System - both in-house and from the Public Services Commission of Ghana.
- To provide periodic reports on staff biometric attendance and punctuality
- To assist in the developing of approved staff establishment for FTEs and to determine the required VAR
- To organize and facilitate sensitization workshops on the Commission's policies and strategic plan
- To provide comprehensive analysis on staff distributions, performance appraisals and report to management
- To ensure effective communication between Management and the workforce to foster better human relations/employee relations.

## My Current Roles Cont'd

- Assist in developing and implementing efficient and effective performance management systems for the Commission.
- Assist in developing and formulating Training and Development programmes for staff with the accompanying budget.
- Perform any other duties to be assigned by the Head, Human Resources and the Director of Administration.

### **Other Activities**

- The GAEC Strategic Corporate Plan 2017 2021
- The National Nuclear Research Institute Strategic Business Plan 2016 - 2025
- The Risk Management Policy of the Secretariat of the Commission
- Drafting of a Nuclear Knowledge Management Policy
- Implementation of the ICT Security Policy and Guidelines

#### Impact of WINS Certification - skills and attitudes

- Improve my commitment to the implementation of policies of the Commission by way of sensitization workshops and brainstorming sessions
- Change my approach towards assessing feedback after policy implementation
- Provided me the ability to assess key indicators in the GAEC Corporate Plan 2017 2021
- Improve my confidence at assisting in the drafting and implementing key policies
- Improve my leadership in sharing the benefits of the other WINS modules to other colleagues and students at the Graduate School of Nuclear and Allied Sciences
- I have already educated our Manager of Office of the Public Relation Affairs on Communication with Civil Society modules and shared the WINS web details

#### Impact of WINS Certification - knowledge

- Engage Staff; include, communicate and clarify expectations
  - brainstorming sessions, retreats etc. during the crafting of the Strategic Goals (6 of them) and each of the 25 Strategic Objectives in the Commission's current strategic plan as wells the numerous sensitization workshops, staff durbars, seminars, etc. aimed at gathering staff views on various policies being implemented by the Commission.
- Align budgets to achieve the desired strategy
- Systematic Analysis in the identification of risk/ threat
- Implementation of technology such as an effective HRMIS also has inherent security issues – information security, level of support from management, specialist knowledge and the traditional approach to system implementation – the software matters most!

#### **Other benefits**

My inclusion in more committees such as the Risk Management Policy drafting, Manpower Audit Team charge to provide established ceilings for the entire workforce of the Commission etc.

#### Anticipated benefits

- Increase in earning potential and workplace recognition. These are lacking due to the lack of recognition of the professional certification across some nuclear institutions where attention is given to academic qualifications more than professional qualification.
- WINS may affiliate with universities to award academic qualifications based on credit hours studied etc.
- Further certification in modules such as communication with civil society and nuclear security programme management.

