



REPÚBLICA DE ANGOLA
MINISTÉRIO DA ENERGIA E ÁGUAS



Basic Professional Training Course on Nuclear Safety for Members of the Arab Network of Nuclear Regulatory Bodies in Africa

Milton Daniel
(AREA - ANGOLA)

SCOPE

- Regulatory Infrastructure
- Number of Staff and Vehicles
- Cooperation with Other Institutions
- Activities and Radiological Installations in Angola
- Activities and Radiological Installations in Angola
- Activities and Radiological Installations in Angola
- Past Activities Performed by AREG's Inspections and Licensing Department
- Applications of Ionizing Radiation in Angola

Regulatory Infrastructure

- Laws and Regulations Already Approved (in Place)
 - Law 4/07 “Atomic Energy Law”
 - Decree 79/07 “Status of AREA”
 - Presidential Decree 12/12 “Radioprotection Regulations”

Regulatory Infrastructure(cont.)

- Regulations waiting Approval;
 - Notification and Authorization Regulations;
 - Regulations on Inspection and Authorizations of Practices;
 - Regulations on Application of Regulations;
 - Regulations on Occupational Radiological Protection.

Regulatory Infrastructure(cont.)

- Regulations under Drafting Process
 - Regulations on Natural Occurring Radioactive Material (NORM);
 - Regulations on Nuclear Medicine;
 - Regulations on Radiotherapy;
 - Regulations on Diagnostic and Interventional Radiology.

Number of Staff and Vehicles

Number of Staff and Vehicles

- AREA Has 23 Workers:
 - 2 – Director and Deputy Director General;
 - 8 – Technicians
 - 11 – Administrative Staff
 - 2 – Support Services

Number of Staff and Vehicles(cont.)

- Academic Qualifications:
 - 1 – PhD
 - 5 – Post-Graduated
 - 6 – Graduated
 - 3 – Bachelors
 - 8 – High School.

Number of Staff and Vehicles(cont.)

- AREA Has 14 Vehicles:
 - 8 – Management and Leaderships;
 - 3 – Inspections;
 - 3 – General Services;

Cooperation with other Institutions

Cooperation with others Institutions

- Ministry of Science and Technology;
- Ministry of Petroleum;
- Ministry of Health;
- Ministry of Agriculture;
- Ministry of Interior;
- Angola Army;
- Customs;
- Agostinho Neto University;

Cooperation with other Institutions

- Angola received a number of IAEA advisory missions as follows:
 - Support for the Development of the Radiation Protection Regulations;
 - Integrated Regulatory Review;
 - Support for the Development of the Atomic Energy Act;
 - *Etc.*

Activities and Radiological Installations in Angola

History

- For over 30 years, Angola has benefited from the peaceful applications of nuclear energy in various sectors such as:
 - *Industry;*
 - *Health*
 - *Agriculture;*
 - *Construction;*
 - *Etc.*

Radiological Instalations & Radioactive Sources

Currently there are over 115 registered radiological sites in AREA database where we can find:

- *3 Linear Accelerators*
- *15 Computed Tomography Equipments;*
- *150 X-Ray Machines;*
- *950 Radioactive Sources:*
 - ✓ *90 % - Category 3*
 - ✓ *5 % - Category 2*
 - ✓ *5 % - Category 4 e 5*

Licensing Process

- In this process are involved 8 Inspectors/ analysts;
- AREA has not the RAIS yet;
- An Excel Database sheet is used for the National Inventory of Radioactive Sources.

Past Activities Performed by AREG's Inspections and Licensing Department in 2014

- Audited process - 189;
- Inspections - 45;
- License Issued - 35;
- Authorizations issued - 113;
- Radioactive Sources Registered - 950;
- Transferred Radioactive Sources - 70;
- Imported radioactive Sources - 139;
- Exported Radioactive Sources - 125;
- Enforcement Actions - 6;
- RPOs e Technicians registered - 617;

Applications of Ionizing Radiation in Angola

- Customs – Control of Goods;
- Oil Sector – Well logging;
- Industry – Non Destructive Testing, Nuclear Control Systems, etc;
- Agriculture;
- Health;
- ETC.



THANKS!