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## **UGANDA'S EXPERIENCE IN THE IMPLEMENTATION OF THE CPPNM AND ITS AMMENDMENT**



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# PRESENTATION OUTLINE

- Introduction
- Implementation
- Challenges
- Way forward
- Conclusion

# Introduction

- ❑ Uganda became a member of the IAEA in 1967
- ❑ Uganda as a member State is making progress towards assenting to International conventions to contribute to the global nuclear security regime. Among these conventions assented to is the CPPNM in 2003 and Code of conduct on the Safety and Security of Radioactive Sources.
- ❑ Uganda is making significant progress towards the implementation of the CPPNM and ratification of its Amendment

# Introduction

- The nuclear materials in Uganda are limited to shielding purposes for ( industrial radiography and Teletherapy treatment machines), particularly Depleted Uranium.
- Nuclear power has been proposed to be incorporated in Uganda's energy mix and pre - feasibility studies are on-going to enable the country make a decision.

# Introduction

Applications of radioactive sources are in the following fields and are spread over the different regions of the country:

- Medicine,
  - Industry
  - Agriculture
  - Education
  - Research.
- This calls for the need to establish a national infrastructure for nuclear security and safety.

# Inventory of Radiation Sources

- 651 - Radiation generators and  
166 - radioactive sources



# Introduction

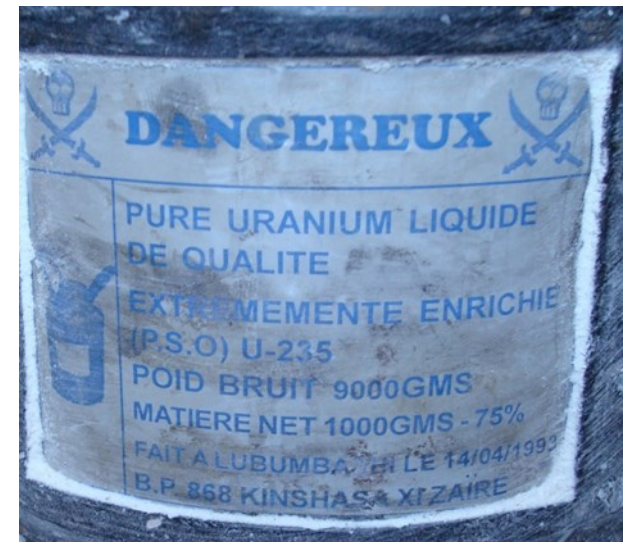
- **432 facilities** are undertaking practices involving radiation sources.
- About **85%** of the facilities in Uganda have been inspected on a regular basis using graded approach
- About **63%** of the facilities are licensed
- The prime responsibility for security of sources throughout their life rests with the authorized person as per Section 54(1) of the Regulations.

# Introduction

## Some past incidents

- **March 2002**, Criminal Investigations Department impounded an old canister containing a Co-60 source.
- **May 2003**, Police impounded a yellow cylindrical container holding Ra-226 source.

**October 2008**, Police recovered a source being sold as Highly Enriched Uranium.





# Introduction

## Nuclear Security Threats

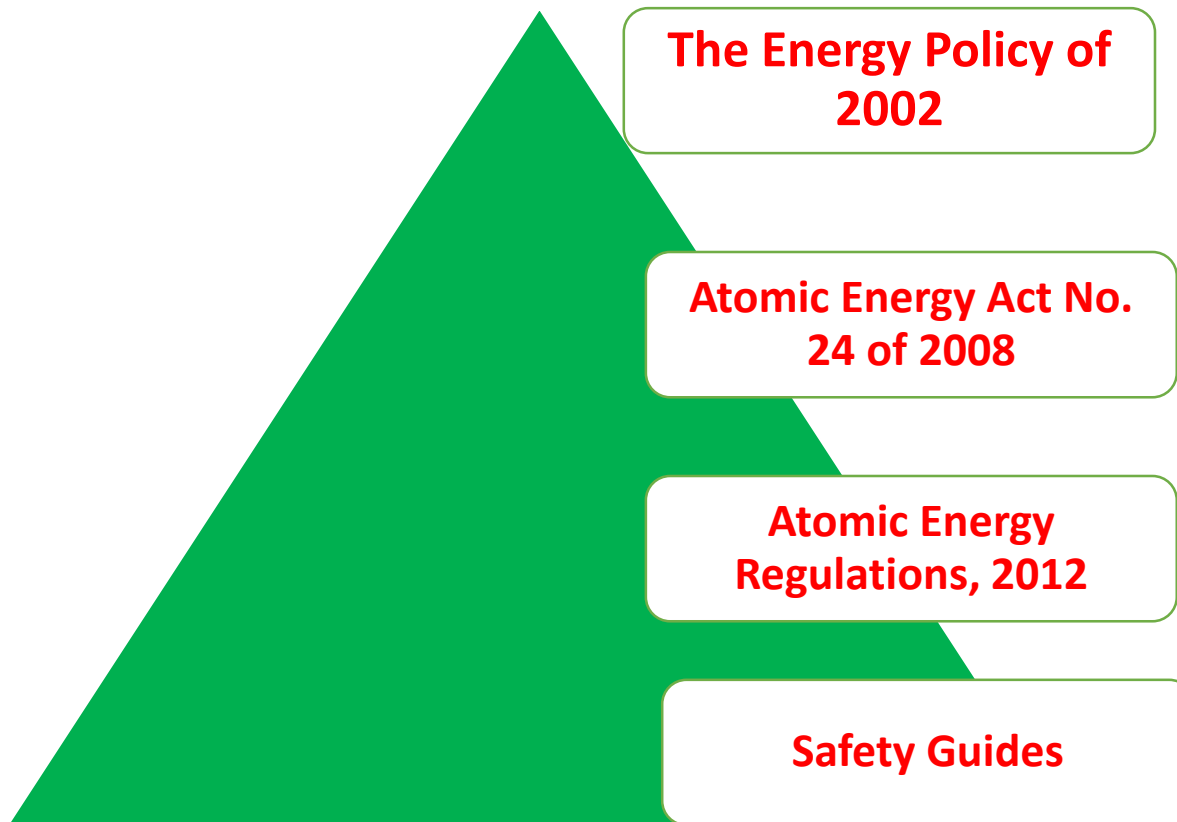
- Possible attacks from
  - Terror groups
  - Rebels groups
  - Criminals groups
- In 2010, a terror attack on revelers killed over 70 people.
- The attack did not involve use of nuclear or radioactive material



# Implementation

- Establishment of the legal and regulatory framework**

# Legal and Regulatory framework



# Legal and regulatory framework

- Atomic Energy Act No.24 of 2008 was enacted by Parliament in 2008
- Atomic Energy Regulations which were gazetted in 2012 .
- Sections 54 & 56 of the Act provide for requirements for safety and security of radiation sources.
- Section 73 (1) provides for making regulations including Regulations for Nuclear Security as a way implementing the various provisions of the Act

# Implementation

## □ Establishment of Radiological Emergency Committee.

- National Nuclear and Radiological Emergency Response Plan.
- Standard Operating Procedures.
- Roles and Responsibilities for different stakeholders
- Training of first responders to nuclear and radiological emergencies.
- Toll free Emergency line **(0800100488)**



# Implementation

## ❑ Upgrading of Nuclear Security Systems at facilities with high activity sources.

(1) Interim Radioactive Sources Storage Facility

(2) Uganda Cancer Institute (UCI)

The following systems were installed:

- security locking systems
- Intrusion detection cameras
- Centralized Alarm



# Implementation

## ❑ Creating awareness among the stakeholders for Nuclear Security.

Conducted sensitization meetings/workshops with stakeholders with the Support of the IAEA

- ✓ MEMD
- ✓ MoJCA
- ✓ MoFA
- ✓ MoGLSD
- ✓ UPF
- ✓ UPDF
- ✓ Uganda Parliament
- ✓ Ministry of Science, Technology and Innovation



# Implementation

- ❖ In May 2017 hosted an IAEA Expert Mission to raise awareness among the policy makers in different government Ministries, Department and Agencies(MDAs).





# Implementation

- After the stakeholder engagement, a Cabinet paper was prepared to facilitate the ratification of the Amendment to the CPPNM.
- Different government stakeholders expressed interest and support for the government to ratify the Amendment.

# Implementation

## □ Promotion of Cooperation at the National, Regional and International Levels

### • **International Level**

- ✓ International Atomic Energy Agency (IAEA)
- ✓ United States Nuclear Regulatory Commission (USNRC),
- ✓ United States Department of Energy (USDoE), - waste management & Nuclear Security
- ✓ CNNC/CZEC (China National Nuclear Corporation) – Nuclear power regulation

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# Implementation

- **Regional level:**
  - ✓ MOU with Tanzania Atomic Energy Commission (TAEC)-2014-Signed
  - ✓ MOU with DR Congo Nuclear Regulatory Authority-2016 -Signed
  - ✓ Draft MOU with Kenya Radiation Protection Board (KRPB) and
  - ✓ **Local**
    - ✓ MOU with Uganda Revenue Authority-customs-Signed
- **Under Discussions**
- Uganda Police, Ministry of Health, UNBS, Allied Health Professional Council



# Implementation

- Review of the current existing legislation for nuclear safety and security
  - Atomic Energy No. 24 of 2008
  - Atomic Energy Regulations, 2012
  - Among other laws

This will enable the domestication of the provisions of the CPPNM and its Amendment among other gaps to be addressed.

# Implementation

- Development of new regulations relevant to the implementation of the CPPNM and its Amendment;
- The following are other Regulations under development.
  - ✓ Nuclear Security Regulations
  - ✓ Radioactive waste management Regulations-**Already reviewed by IAEA**
  - ✓ Naturally Occurring Radioactive Material(NORM)-**already reviewed by IAEA**
  - ✓ Transport of Radioactive Materials

# Implementation

- ❑ Conduction of Education and Training of personnel responsible for implementing nuclear security measures in the country.
- Uganda received IAEA Expert Mission on the development of a National Strategy on Education and Training for Radiation Safety and Security
- Training of security agencies to respond to nuclear and radiological emergencies



# Implementation

## □ Reviewing the national legislation

This is to facilitate the country in making decisions to assent to all relevant conventions that may affect the current municipal laws and domesticate the relevant provisions of the conventions in the national laws

# Implementation

## ❑ Development of an Integrated Nuclear Security Plan(INSSP) for Uganda

Uganda, with the assistance of the IAEA, developed INSSP for Uganda

It was reviewed in 2014 and another review is to take place in December 2017





# Implementation

## ❑ Establishment of a Nuclear Security Committee

A nuclear security Committee is being established comprising of representatives from national agencies with responsibilities related to national security.

Nuclear security requires formal structures for efficiency and effectiveness

# Challenges

- ❑ Limited **awareness** of about the importance of the CPPNM and its amendment among the stakeholders.
- ❑ Non **domestication** of the provisions of the CPPNM and its Amendments in the national legislation.
- ❑ Inadequate **resources**(HR, financial and material) necessary for implementation of the CPPNM.
- ❑ Inadequate **legal provisions** to support the implementation of the CPPNM and its Amendment
- ❑ Low levels of both **safety and security culture** among the operators of radioactive sources and facilities

# Way forward

- Continuous **sensitisation** of all stakeholders to promote security culture.
- Fast tracking the **ratification** of the Amendment to the CPPNM.
- Reviewing the existing legal framework to **identify gaps** and make the necessary amendments in the laws to **include provisions** necessary to implement the CPPNM and its Amendment.
- Promotion of cooperation at the **national, regional and international levels** in the implementation of the CPPNM and its Amendment.

# Conclusion

- Uganda is committed to **the ratification of the CPPNM Amendment** and its implementation.
- Uganda is to establish the **necessary legal and regulatory framework** necessary for the implementation of the CPPNM and its Amendment.
- Generally, successful implementation of the CPPNM and its Amendment requires international cooperation and universal adherence in **theory and practice** to the provisions of the CPPNM and its Amendment
- IAEA is encouraged to continue its **pro-active efforts** towards enabling **universal adherence** to the CPPNM and its Amendment

**THANK YOU**