



Building of Safety Network in Africa: Old Paradigms and New Initiatives



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OLD PARADIGMS



- **The Model Project**
 - Strengthening Radiation Protection Infrastructure in MS
 - **Building Nuclear Safety Infrastructure in New Comer States**
- **Thematic Programming**
 - Programme of Action on Cancer Therapy



MODEL PROJECT APPROACH



- The Model Project Approach (MPA) is one of the three principal tools the Agency has deployed at achieving its strategic objective, by **partnering with Member States to 'achieve productive and sustainable human capacity building in nuclear institutions.**



MODEL PROJECT APPROACH



- To this end the technical cooperation with the Member States is directed at promoting “tangible socio-economic impact by contributing directly in a cost-effective manner to the achievement of the major sustainable development priorities of each country”.



MODEL PROJECT APPROACH



Model Projects therefore:

- responds to a real need of the developing country;
- produces significant economic or social impact through **the end user**;
- reflects the distinct advantages of nuclear technology over other approaches;
- attracts strong government commitment; and
- demand direct involvement of the sector involved



Model Project on “*Strengthening Radiation Protection Infrastructure*”



- Main objective

to eliminate the shortcomings in their safety infrastructure and control of radiation sources, i.e. **implement the BSS**



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NEW INITIATIVES



- Emergence of Regional Networks
 - ANSN
 - FORO
 - FNRBA
 - ANNuR
 - The Norwegian-funded Extra Budgetary Programmes on Safe Nuclear Energy for Romania and Bulgaria (sub-regional)
- Cross-Linking of Regional Networks
- Development of the *Global Nuclear Safety and Security Network (GNSSN)*



FNRBA MEMBERSHIP



33 IAEA Member African Nuclear Regulatory Bodies

Algeria	Angola	Botswana	Burkina Fasso
Cameroon	Chad	CoteD'Ivoir	DRC
Egypt	Ethiopia	Gabon	Ghana
Kenya	Libya	Madagascar	Malawi
Mali	Mauritania	Morocco	Mozambique
Namibia	Niger	Nigeria	Senegal
Seychelles	Sierra Leone	South Africa	Sudan
Tanzania	Tunisia	Uganda	Zambia
Zimbabwe			

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FNRBA CHARTER



Membership

Membership of the FNRBA shall be open to all national nuclear regulatory bodies in Africa on a voluntary basis.

Organs of the FNRBA

The FNRBA shall function through the following organs –

- The Plenary;
- The Steering Committee; and
- The Thematic Working Groups.



THEMATIC WORKING GROUPS



• TWG

ACTIVITY

COORDINATOR

- TWG1 Upgrading Legislative and Regulatory Infrastructure Ethiopia
- **TWG2 Regulatory Framework for Licensing of NPP** South Africa
- TWG3 Upgrading of Radiation Safety in Uranium Mining and Milling Namibia
- **TWG4 Upgrading of Radiation Safety in Radiotherapy** Tunisia
- TWG5 Upgrading of Nuclear Safety in Research Reactor Ghana
- TWG6 Upgrading Security of RS and Waste Safety Mngt Infrs. Tanzania
- TWG7 Education and Training, and Knowledge Management Nigeria
- TWG8 Transportation Safety Zimbabwe
- TWG9 Emergency Planning and Response South Africa



COMMON CHALLENGES



- **CANCER - Radiotherapy**
 - PACT

- **ENERGY POVERTY- Nuclear Power**
 - Wanted: Programme of Action for Safe Nuclear Electricity (PASNE)



WIRED WORLD



- The world is **FLAT, MIXED AND OPEN** :
 - **El-Baradei**: MS rights and responsibilities Nuclear Power
 - **Amano**: cancer also afflicts developing countries

- Response is **MIXED and OPEN**:
 - Developed countries
 - Developing countries



Number of Member States in the Radiotherapy Safety Infrastructure



Algeria	Angola	Botswana	Burkina Fasso
Cameroon	Chad	CoteD'Ivoir	DRC
Egypt	Ethiopia	Gabon	Ghana
Kenya	Libya	Madagascar	Malawi
Mali	Mauritania	Morocco	Mozambique
Namibia	Niger	Nigeria	Senegal
Seychelles	Sierra Leone	South Africa	Sudan
Tanzania	Tunisia	Uganda	Zambia
Zimbabwe			



Number of Member States in the Nuclear Power Safety Infrastructure



- Algeria
- Egypt
- Ghana
- Kenya
- Libya
- Morocco
- Namibia
- Nigeria
- Senegal
- South Africa*
- Sudan
- Tanzania
- Tunisia
- Uganda



CHALLENGES OF RADIOTHERAPY IN AFRICA



- National Policy on Cancer
- Radiation Safety Legislation and Regulation
- Basic Equipment
- Ancillary Equipment
- Dosimetry Service
- Personnel
- Procedure



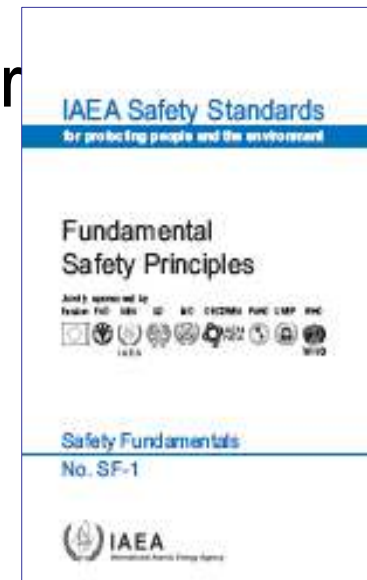
WANTED: Model Project on Nuclear Safety Infrastructure



- Objective
 - Upgrade Nuclear Safety Infrastructure in New Comer States by implementing the Basic Safety Fundamentals, SF-1

Incorporating the basic safety principles for

- nuclear safety,
- radiation protection,
- Waste management and transport safety



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FNRBA PROGRESS



- » **Strategic Plan Direction Defined**
 - » **Round Table Discussion December 2009**
 - » **Launched the five-year Strategic Plan December 2009**

- » **Collaboration with US NRC**
 - » **Nuclear Executive Workshop - Abuja, Nigeria, March 2010**
 - » **Siting Workshop - Centurion, South Africa, October 2010**

- » **2nd Plenary Meeting held in Nairobi, Kenya in May 2010**

- » **Signing of MOU between KINS and FNRBA 23rd Sept 2010**

- » **Leverage on IAEA Technical Cooperation Project**
 - » **Support workshops & meetings**
 - » **Self-assessment of regulatory infrastructures**



CONCLUSION



- FNRBA is vigorously pursuing its mandate of emplacing a sustainable legislative and regulatory infrastructure in Africa: Conventions and Treaties including the Pelindaba Treaty
- FNRBA appreciates the support of the IAEA and all our other partners



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