Session 2.6
Supporting Radiation Safety for Occupational Exposure: Case of Nigeria

Professor S. B. Elegba
Department of Physics, University of Abuja
Abuja, Nigeria
The Problem

• Fallout from the Atomic tests in the Sahara Desert in the early 1960s
• Widespread use of ionizing radiation
• **Weak Safety Infrastructure**: Lack of appropriate legislation, lack of institutional framework, and inadequate human resources

The Solution

Government and IAEA Support: Scope/Nature

• Government support
  – Establishment of the Federal Radiation Protection Service in 1964
  – Promulgation of the Nuclear Safety and Radiation Protection Act in 1995
  – Provision of the counterpart funding for the MNSR project in 1998
  – Establishment of the Nigerian Nuclear Regulatory Authority in 2001
  – Annual budget appropriation for NNRA by law since 2002

• IAEA Contribution
  – **TC projects**: equipment, experts, fellowships and training courses
  – IAEA Missions: RAPAT, WAMAP, RaSSIA, IRRS
  – The Model Project 1995-2004
  – The approval of the Miniature Neutron Source Reactor (MNSR) in 1995
Achievements

- Nuclear Safety and Radiation Protection Act in 1995
- Nigerian Nuclear Regulatory Authority in 2001
- Promulgation of eleven regulations on radiation safety
- Establishment of the Nigerian Institute of Radiation Protection and Research in 2007
- Establishment of the Nigerian SSDLs in 2007 and 2008
- The Postgraduate Program in Radiation Protection, in 2007
- Accreditation of three Dosimetry Service Providers (independent of NNRA)
The Way Forward

Nigeria

• Update of the National Register of Radiation Workers;
• Standardization of personal dosimetry service technology;
• Establishment of Quality Assurance programmes for dosimetry service providers;
• Update of National Register of Radiation Sources;
• Improve on documentation of the various regulatory activities
• Address the challenge of under-utilization of the LINACs

IAEA

• Strengthen the dialectic relationship between promotion and regulation for the sake of sustainable development;
• Strengthen regional cooperation between regulatory bodies;
• Establish inter-comparison programmes on radiation protection of workers, patients and the public
• Facilitate the establishment of regional/sub-regional maintenance workshops for LINACs
Expected Outcomes

• Establishment of National Dose Registry
• Improved quality of service in radiotherapy
• Sustainability of radiotherapy facilities in the country
• Increased access to cancer treatment in the country
THANK YOU