NUCLEAR FORENSICS CAPABILITIES IN UGANDA: NOW AND THE FUTURE

There is widespread use of nuclear and radiological materials (radioactive sources and nuclear material) and technologies in the various practices and applications in throughout the world. In Uganda, these materials are used in medicine, agriculture, industry, research and education etc. Uganda has declared interests in embarking on the development of nuclear energy resources and technology for the generation of electricity. This coupled with the high rates of growth in industry and medical care advancements imply a continued rise in the use of nuclear and radioactive materials in the region and thus will consequently increase the likelihood of occurrence of radiological or nuclear incidents if not properly managed.

The current security situation and recent events in Uganda, the East African region and the world further assert the existence of the nuclear terrorism threat. It is known in current times that there are terrorists out there that are interested in obtaining nuclear or radiological materials with the aim of fabricating an improvised nuclear devise or a radiological dispersal and/or exposure device for terrorism purposes.

Following a nuclear security event or a radiological or nuclear incident, the types of evidence that may be collected include the radiological or nuclear material itself, referred to as radiological evidence, and traditional types of evidence that may be contaminated with these materials, referred to as contaminated traditional evidence. Traditional uncontaminated evidence is in many cases present and must be handled such that contamination is prevented. Upon collection of evidence that includes nuclear or radioactive materials, it is very important to conduct a forensic analysis of the seized materials to obtain crucial information to enable a successful investigation. It is thus imperative for Uganda and all states in the establishment of response measures and systems for nuclear security events to take nuclear forensics into consideration as key component.

Uganda's nuclear security regime is coordinated by the Atomic Energy Council with active participation of other key stakeholders like the national police, the intelligence service, the defence forces, users of radiation sources and more. There are some capabilities in terms of equipment and technical personnel in the regulatory body, some universities and the national police. However, there are at present minimal measures and arrangements for their coordination and optimization for the strengthening and consolidation of the state's nuclear forensic capabilities. It is also of concern that there are no visible cross-border bilateral or multilateral cooperation mechanisms in nuclear forensics.

The paper will deeply assess the current situation as regards capabilities and arrangements for nuclear forensics in Uganda. It will describe the existing capabilities in the different institutions within the country identifying gaps and strengths. It will further generate recommendations for improvements in the national capabilities and establishment of arrangements for international collaboration and support in line with recommendations of the International Technical Working Group on Nuclear forensics (ITWG) and with lessons from international best practices.

Gender

Male

State

Uganda

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Track Classification: MORC: Nuclear forensics