



The physical protection of radiation sources and radioactive materials in Tanzania

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ABSTRACT

In recognition of the legal deficiency and the awareness of radiation safety, the parliament of the United Republic Of Tanzania enacted the protection from Radiation Act no. 5 of 1983, which established the National radiation commission (NRC) as a regulatory authority. The main objective of the Act was to provide for a legal framework and guidance of the control of the use of radiation sources and radioactive materials with the view to achieve an assurance for acceptance level of radiation protection and safety standard.

Due to trade liberalization that is currently experienced in the country, the increase in the number of radiation practices is observed yearly. Medical diagnostic X-ray facilities constitute 72% of all radiation installations in the country. Radioactive materials used in research, teaching and industrial application constitute 24% and those used in therapy and nuclear medicine is 4%.

About seven radioactive materials incidents occurred in Tanzania during 1996-2000. Among these cases, some were illegal possession and across-boarder trafficking of radioactive materials. Theft and losses radioactive equipments or sources were also experienced.

This presentation discusses the experienced incidents of illegal possession, theft and loss of radioactive materials and the lesson learnt from those events in connection with our operational laws. The needs for improvement of the whole system of notification, authorization, registration and licensing to cope up with increase in radiation practices and cross-border illegal trafficking of radioactive materials. The importance of involving immigration officers, police and custom officer with proper training in radiation safety aspect is emphasized. The recommendation are given in an attempt to rescue the situation.