

Implementing and Developing Nuclear Safety and Security Culture for Radioactive Material, Associated Facilities and Activities

The use of radioactive material is increasing rapidly all over the world for a wide variety of beneficial purposes, in industry, medicine, agriculture, research and education. There is, thus, need for safe and secure applications of radioactive material, and safety and security measures are protect and prevent from causing a radiological hazard on individuals, society and the environment. Myanmar has used radioactive sources in this sectors, are safely and securely controlled under the IAEA issued International Basic Safety Standards and Security Guidance. At present, Myanmar is implementing safety and security culture management for radioactive material, associated facilities and activities, and developing in safety and security culture on regulatory capabilities for National Regulatory Infrastructure.

National and international nuclear safety and security culture practices indicate that better prepare for, and mitigate the risk of, an attack or an accident by developing and implementing a harmonized approach to nuclear safety and security throughout all levels of an operation and organization. Nuclear safety culture means the assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, protection and safety issues receive the attention warranted by their significance, and nuclear security culture means the assembly of characteristics, attitudes and behavior of individuals, organizations and institutions which serves as a means to support and enhance nuclear security. Establishing a strong safety and security culture is one of the fundamental management principles for an organization dealing with radioactive material. All activities involving the use of radioactive material require careful attention to safety and security, and should be designed and implemented in an integrated manner, so that security measures do not compromise safety and safety measures do not compromise security.

In this proposal, presents implementing effective regulatory capabilities in using radioactive sources, associated facilities and activities, that developing by National legislation and international guidelines, using safety and security culture requirements promoted by IAEA. In Myanmar, Atomic Energy Law was placed in 1998 and to be more comprehensive for nuclear safety, security and safeguards; Nuclear Law is drafted and now, under processing. Currently, Division of Atomic Energy (DAE), established in 1997 under the Ministry of Science and Technology, is designated as a Regulatory Authority in comply with Atomic Energy Law, and performs all regulatory functions related to safety and security in utilization of radiation sources, radioactive material and irradiation apparatus. The sub-Division, Regulatory Control Division is assigned responsibility for law implementations, regulations, code of practices and rules, notification, registration, licensing, inspection, emergency response and preparedness, and law enforcement.

Myanmar has no nuclear fuel cycle facilities, power reactors or research reactors. The use of radioactive sources in medical, industrial, research and education, are imported and currently, total national inventory of radioactive sources is 857 with 796 facilities. In 2017, 220 active licenses across all sectors; industrial sector makes up 84%, healthcare services at 9% and the rest are research and education, issued licenses.

To control radioactive material, associated facilities and activities for safe and secure, DAE has the implementing internationally harmonized regulatory capabilities; Radiation Detection and Measurement Laboratory, Nuclear Instrumentation Laboratory, Occupational and Medical Exposure Laboratory, Non-Destructive Testing Laboratory, Gamma Irradiation Facility, Radioisotope Techniques Laboratory, Food and Environmental Monitoring Laboratory, Radioactive Source and Waste Storage Facility, Secondary Standard Dosimetry Laboratory, and DAE provides Personal Monitoring Services, Technical Support and Guidance to radiation users, Environmental Monitoring, and conducts Export - Import Control through Atomic Energy Law, Emergency Preparedness, Training Programme, Public Awareness Programme, and is preparing to develop Physical Protection Plan, Code of Conduct for Safety and Security of Radioactive Sources, Radioactive Waste Management, Emergency Response Programme, Security Requirements, Technical Facilities including appropriate Equipment and Human Resources, and National Legislation. To improve the transparent activities in Nuclear Safety and Security Culture, Myanmar ratified International Convention on Nuclear Safety, acceded on December 6, 2016, Convention on Physical Protection of Nuclear Material, acceded on December 6, 2016, Comprehensive Nuclear Test Ban Treaty, acceded on September 21, 2016, and participates in the IAEA Integrated Nuclear Security Support Plan, and also to strengthen National Regulatory Infrastructure in Nuclear Safety and Security, Myanmar has cooperated with relevant national, regional and international organizations in Training,

Workshop.

Awareness and Culture Assessment play key roles in developing, maintaining, and enhancing nuclear safety and security culture, and benefit of harmonizing the two, ensures that threat and danger to the safety and security of operation are real, credible, and deserving of attention. Thus, to be strengthening effective safety and security culture for radioactive material, associated facilities and activities in Myanmar, is trying to fill the gaps in national regulatory framework, technical facilities including appropriate equipment and human resources, national and international cooperation, financial supporting, and effective security culture management for radioactive material in use and disused sources storage, that will be supported to qualified assessments for nuclear safety and security culture on regulatory capabilities.

Gender

Female

State

Myanmar

Authors: Ms WIN, NWET NWET (Division of Atomic Energy, Ministry of Education); Mr LATT, KHIN MAUNG (Division of Atomic Energy, Ministry of Education)

Presenter: Ms WIN, NWET NWET (Division of Atomic Energy, Ministry of Education)

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