

IRRS Good Practices

Responsibilities and Functions of the Government (Module 1)

Competence for safety

Italy – Initial Mission

Mission Date: December 2016

Good Practice

The Italian system of education and training for qualified experts is of outstanding high quality and is exemplary in radiation protection.

Observation

The requirements for the qualification and technical skills of a qualified expert are challenging and ambitious. There exist three qualification levels with high formal requirements (university degree, technical schools, etc.). This sophisticated standard creates a high reputation of the qualified expert and thus supports their credibility and authority.

Basis

GSR Part 3 Requirement 2 para 2.21 states that “The government shall ensure that requirements are established for:

- (a) Education, training, qualification and competence in protection and safety of all persons engaged in activities relevant to protection and safety;
- (b) The formal recognition of qualified experts”

IAEA Comments/Highlights

Through the requirements established for the qualification levels and training of the qualified experts in radiation protection in Italy, the government managed to achieve high standard systems for education and training of those experts. Therefore, the government became capable of building and maintaining the competence for persons and organizations that had responsibilities related to protection and safety of facilities and activities.

Guatemala – Initial Mission

Mission Date: February 2017

Good Practice

Guatemalan Strategy for improving national competency and the detailed gap analysis for the country's needs in different aspects of science and technology is commendable.

Observation

Guatemala had developed a Strategy for improving national competency and had conducted a detailed gap analysis for the country's needs in different aspects of science and technology.

Basis

GSR Part 1 Requirement 11 states that “*The government shall make provision for building and maintaining the competence of all parties having responsibilities in relation to the safety of facilities and activities.*”

IAEA Comments/Highlights

Based on a detailed assessment including a gap analysis of resources and competence available to support the safe operation of radiation facilities and activities, the country identified an important gap between the need and the available expertise in radiation safety. As a result, upon an initiative of the *Dirección General de Energía* (DGE) – the Guatemalan regulatory body - along with the Secretary for Planning and Programming of the Presidency of Guatemala (SEGEPLAN), the Guatemalan Education and Training Strategy in the Area of Radiation Protection was developed and approved.

The Strategy was addressed to qualified experts and users of nuclear technologies such as Radiation Protection Officers (RPOs) and operators. The detailed analyses and assessment of the existing situation and future country needs for competence in the field was commendable and could be used as a model for other countries.

Greece – Follow-up Mission

Mission Date: November 2017

Good Practice

The Greek Atomic Energy Commission (EEAE) was implementing a research project on radiation protection and clinical audits in new diagnostic and therapeutic technologies including topics on justification and referral criteria the findings of which would enhance patient protection.

Observation

EEAE was implementing a research project on radiation protection and clinical audits in new diagnostic and therapeutic technologies to enhance patient protection.

Basis

GSR Part 3 Paragraph 3.156 states that “*Generic justification of a radiological procedure shall be carried out by the health authority in conjunction with appropriate professional bodies, and shall be reviewed from time to time, with account taken of advances in knowledge and technological developments*”.

IAEA Comments/Highlights

The EEAE was implementing a research project on radiation protection and clinical audits in new diagnostic and therapeutic technologies. Topics on justification and referral criteria have been included in the project. Moreover, EEAE monitors the justification of the diagnostic examinations, the optimisation and verification of the doses delivered both in diagnosis and therapy, in the context of a defragmented “one stop shop” authorization process, thus improving patient protection.

Türkiye – Initial Mission

Mission Date: 5 to 16 September 2022

Good Practice

The Government established a scholarship programme for selected Turkish students to pursue graduate education in the nuclear field at foreign universities with support from the Ministry of National Education. In total 132 students have been sent abroad for studying on behalf of NDK as of 2022.

Observation

Türkiye established an overseas graduate education scholarship program to meet the qualified human resources needs of universities and public institutions and organizations. A large portion of these students are sent on behalf of NDK and are expected to join the NDK after finishing their education.

Basis

GSR Part 1 (Rev. 1) Requirement 11 states that “The government shall make provision for building and maintaining the competence of all parties having responsibilities in relation to the safety of facilities and activities.

IAEA Comments/Highlights

Türkiye has established an overseas postgraduate education scholarship programme, so-called YLSY, run by the Ministry of National Education in return for compulsory service in order to meet the qualified human resources needs of universities and public institutions and organizations. The objective is to realize the science and technology transfer needed by Türkiye. Thus, for several years, NDK (Regulatory Body in Türkiye) has been using this tool to recruit new staff in addition to the usual governmental hiring system.