IRRS Good Practices

Responsibilities and Functions of the Regulatory Body (Module 3)

Staffing and competence of the regulatory body

<u>Lithuania – Initial Mission</u>

Mission Date: April 2016

Good Practice

All Radiation Protection Centre (RSC) employees were included in systematic planning and follow up of training. The dissemination of information of the lessons learned in international courses and seminars, and the self-assessment of the usefulness of received training was an integral part of the management of training.

Observation

The systematic approach included evaluation of the training, the quarterly seminars for disseminating the lessons learned and, after one year the assessment of usefulness of the training by the participating individuals.

Basis

GSR Part 1 Para. 4.13 states that "A process shall be established to develop and maintain the necessary competence and skills of staff of the regulatory body, as an element of knowledge management. This process shall include development of a specific training programme on the basis of an analysis of the necessary competence and skills. The training programme shall cover principles, concepts and technological aspects, as well as procedures followed by the regulatory body for assessing applications for authorization, for inspecting facilities and activities, and for enforcing regulatory requirements."

IAEA Comments/Highlights

RSC developed training programmes focussed on the work areas to build up and maintain the technical competence of its staff. The initial training of all staff was 40 hours. In addition, four training programmes were organized in areas of radiation protection in medicine, radiation protection in industrial and scientific facilities, radiological measurements and methods to assess the exposure, and radiological accidents and their management. Each staff member was expected to have at least 120 h of training in every five years.

The annual planning of the RSC training was based on the annual evaluation of the employees. The plan specified training for each staff member. There were also follow-ups of the training and quarterly seminars on dissemination of the lessons learned. The training was evaluated by the participants after training activities and, after a year, participants assessed the usefulness of the training.

China – Follow-up Mission

Mission Date: September 2016

Good Practice

The extensive use of social software and networking by the Ministry of Environment Protection (MEP) and National Nuclear Safety Administration (NNSA) in daily business for sharing information and regulatory experiences, raising questions and comments and as a discussion forum in order to enhance the effectiveness of regulatory activities was considered as a good practice.

Observation

In order to share the regulatory experience and enhance the regulatory effectiveness, MEP set up groups of different special areas using social software (QQ & WeChat), for example: in the area of nuclear technology utilization, there were 5 groups on QQ network, including one director group, two junior inspector groups, two system manager groups, with more than 1000 users.

Basis

GSR Part 1 Requirement 15 states that "The regulatory body shall make arrangements for analysis to be carried out to identify lessons to be learned from operating experience and regulatory experience, including experience in other States, and for the dissemination of the lessons learned and for their use by authorized parties, the regulatory body and other relevant authorities."

IAEA Comments/Highlights

Information and regulatory experience sharing was done through the networking. In order to share the experience and enhance the effectiveness, the MEP (NNSA) set groups of many special areas on social software (QQ and WeChat). For example, in the area of nuclear technology utilization, there were 5 groups on QQ network, including one director group, two junior inspector groups and two system manager groups. There were similar groups on the WeChat network. The number of all members of groups is more than 1000. Work topics could

be discussed in groups, and members could ask questions about their work in the groups and could answer any question that they were interested in sharing their experience. At the time of the mission, there were about 1000 messages a day in an observed group.

Belarus – Initial Mission

Mission Date: October 2016

Good Practice

The regulatory body established a variety of tools to manage their rapid growth, and adopted innovative approaches to building a healthy organizational culture. Innovative practices included delegating responsibility for preparing the knowledge management strategy to newer staff, holding day-long meetings with staff to solicit feedback and holding a competition for staff to prepare essays on potential improvements (and establishing working groups to implement these improvements).

Observation

Recognizing the challenges associated with their rapid growth and the importance of knowledge management, Gosatomnadzor, the Belarusian regulatory body, placed a particular emphasis on recruiting and developing new talent, on building and maintaining a healthy organizational culture and continuous improvement.

Basis

- (1) GSR Part 1 (Rev.1) Requirement 18, para. 4.13 states that: "A process shall be established to develop and maintain the necessary competence and skills of staff of the regulatory body, as an element of knowledge management."
- (2) GSR Part 2, Requirement 12, para. 5.2 states that: "Senior managers and all other managers shall advocate and support the following: ...(c) An organizational culture that supports and encourages trust, collaboration, consultation and communication; ... (e) Measures to encourage a questioning and learning attitude at all levels in the organization and to discourage complacency with regard to safety."

IAEA Comments/Highlights

Gosatomnadzor performed an analysis, based on advice from experts from other countries, in order to identify all areas in which technical expertise was required, and identified national research and educational institutions as sources, or potential sources, of such expertise.

Gosatomnadzor developed a proposal to develop a dedicated support organization that would serve as a dedicated Technical Support Organization (TSO). The TSO would be established as a separate organization to improve the regulator's expertise to adequately perform their regulatory duties. This was particularly important as Gosatomnadzor prepared for oversight of the operation of the Belarusian NPP.

Gosatomnadzor was focused on employee development, and individual training programs were developed for all staff. In addition, Gosatomnadzor developed a targeted process to effectively integrate junior specialists or new employees without experience, which included the development and implementation of 6-month individual programs, and the organization of internships in various departments of Gosatomnadzor to ensure staff developed a good understanding of the operations of the whole department before commencing work in a particular section. These efforts would support the regulatory body on building capacity to effectively regulate nuclear safety and radiation safety.

South Africa – Initial Mission

Mission Date: December 2016

Good Practice

The National Nuclear Regulator (NNR) supported the recruitment of qualified and experienced persons to its vacant positions through a joint bursary and internship programme.

Observation

To facilitate the recruitment of qualified persons having workplace expertise, the NNR supported bursary students in various fields of science and engineering at higher learning institutions, and operated an internship programme for freshly graduated persons.

Basis

GSR Part 1 Requirement 18, para. 4.12 states that "The human resources plan for the regulatory body shall cover recruitment."

IAEA Comments/Highlights

The NNR had a Succession Planning Policy and Procedure in place that addressed the replacement of staff in critical positions, including retired persons. To facilitate the recruitment of qualified persons having workplace expertise, the NNR supported bursary students in various fields of science and engineering at higher learning institutions, and operated an

internship programme for freshly graduated persons. The IRRS team was informed that NNR also offered its employees fully funded bursaries in post-graduate studies.

The joint bursary and internship programme contributed to the development and maintenance of the necessary competence and skills of staff of the regulatory body, as an element of knowledge management.

Cyprus – Initial Mission

Mission Date: February 2017

Good Practice

The Radiation Inspection and Control Service (RICS) of the Department of Labour Inspection (DLI) had a system, implemented annually, for establishing and addressing the competence and training needs among its staff aimed at improving their contribution to achievement of organizational goals.

Observation

DLI established a mechanism to determine and address the competences and training needs of its employees on an annual basis. The assessment was conducted by a committee comprising employees, which made recommendations to the director. A budget was provided annually to address the identified training needs.

Basis

GSR Part 2 Requirement 9 states that "Senior management shall determine the competences and resources necessary to carry out the activities of the organization safely and shall provide them."

IAEA Comments/Highlights

No comments or highlights on this good practice.

<u> Australia – Initial Mission</u>

Mission Date: November 2018

Good Practice

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) had a welldeveloped strategy to compensate for the departure of qualified staff that systematically assessed succession risks for every position in the organization and prioritised the development of competencies that were found to be vulnerabilities to the long-term capability of the organization.

Observation

In order to identify potential future resource risks, ARPANSA had systematically assessed every position in the organization to identify knowledge management and succession risks and identify mitigation measures to address any risks. These measures had been prioritized based on the risk of losing an essential competency.

Basis

GSR Part 1 (Rev 1) Requirement 18, para. 4.12 states that "4.12. The human resources plan for the regulatory body shall cover recruitment and, where relevant, rotation of staff in order to obtain staff with appropriate competence and skills, and shall include a strategy to compensate for the departure of qualified staff."

IAEA Comments/Highlights

In 2017, ARPANSA undertook a comprehensive review of all positions in the organization as part of their succession planning. This included identification of vulnerable areas and priority areas for strengthening resilience of some key competencies.

ARPANSA had several elements necessary to support development and maintenance of employee competencies. The succession plan included an employee by employee assessment, and all staff had individual learning plans that identified learning both for development in current role and for future development. ARPANSA has also developed a four-year learning strategy that included many deliveries focused on knowledge sharing, career development, people management, enterprise capabilities and learning management.

In addition, ARPANSA provided training and development to staff, both through formal and experiential based learning. Induction courses provided an overview of the operations of the regulatory body and key processes, and technical courses offered both in house and externally were used to ensure competence in the necessary technical areas.