

Fact Sheet on Improvement of Management Systems for Nuclear Facilities

What is the activity or service provided?

The area of Quality Management/ Quality Assurance has been changed dramatically over the past years. The nuclear facilities moved from the 'traditional' Quality Assurance approach towards Quality Management Systems, and later a new concept of Integrated Management Systems was introduced. The IAEA is developing a new set of Standards on Integrated Management Systems, which will replace the current 50-C-Q/SG-Q1-Q14 Code. The new set of document will require the integration of all management areas into one coherent management system.

What are the benefits?

This activity will assist the Member State to improve the effectiveness of the management systems in utilities, in particular:

- Integrate vision and strategy of the organization
- Implementation of continuous process improvement in all areas
- Simplification through reduction of the procedure
- Faster reaction to changing challenges from outside or stakeholders
- Creates synergy, consistency and decreases bureaucracy
- Better understanding of the 'big picture'
- Easier compliance, less violations, greater staff participation and ownership leading to stress reduction and better utilisation of creativity
- Better quality/risk issues conflict resolution and management
- A more user friendly and simpler management system
- Removal of barriers between organizational units
- Aligns the organization to deliver the overall goals and objectives
- Reduce administrative costs
- Better "one house" culture throughout the organization

How to benefit of this activity?

This activity can be benefited by the Member State through official request. The activity will consist of the following:

- Evaluation of the current status of the (quality) Management System;
- Present proven practices that can serve as models to solve specific issues;
- Assistance in highlighting the possible areas of improvement and identifying actions, e.g.:
- Organization
- Management of change
- Human performance enhancement
- Training and qualification, knowledge management
- Procedures and instructions
- Root cause analysis
- Document control and records
- Configuration management
- Emergency control

- Operating status of equipment
- Maintenance
- Management of procurement activities
- Management of interfaces
- Inspection and testing for acceptance
- Modifications to equipment and systems
- Assessments, reviews and audits
- Management self-assessment
- Non-conformance control and corrective actions
- Continuous improvement
- Provide practical guidance for implementation of the defined actions;
- Follow-up the flow of the improvement efforts.

Recent work or success story

The new set of standards on Management Systems promotes the concept of the Integrated Management Systems. Based on new set a big number of documents are under preparation. These documents will address the current issues in the management systems area, e.g. Management of Change, Continuous Improvement, Self-assessment, and Attributes of effective management, etc. Currently NPES is providing a number of TC projects and Extra Budgetary Programmes to assist Member States in this area.

Looking ahead:

The new Standards on Management Systems will be published in 2006. A number of Regulatory bodies already indicated that they would take the new Management System Standards as a basis for the national regulation. This fact will motivate a considerable change in the management of nuclear utilities, requiring a new approach.

Other Information:

This activity is suitable for all IAEA Members States with large or limited nuclear capabilities. The service is directed to provide assistance for the management of all organizations carrying on or regulating nuclear activities and facilities.

For more information please contact your IAEA TC Country Officer or

Pal Vincze
Nuclear Power Engineering Section, Division of Nuclear Power
International Atomic Energy Agency
Wagramer Strasse 5. P.O. Box 100
1400 Vienna, Austria
Phone: +43-1-2600 22805
Fax: +43-1-2600 7 22805
E-mail: p.vincze@iaea.org

Further information is available on the Departmental website,

<http://www.iaea.org/OurWork/ST/NE/index.html>