

# Management system for regulating transport of radioactive material

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## Abstract

The objective of this paper is to describe the main characteristics and fundamentals of the Nuclear Regulatory Authority's (Autoridad Regulatoria Nuclear, ARN) management system applied to the regulation of transport of radioactive material, in Argentina.

In the frame of ARN's quality policy, "Protection against ionizing radiation on transport of radioactive materials" was selected as one of the regulatory processes, named TRM process from now on. ARN's quality management system is integrally based on ISO 9000 system addressed to help organizations in designing and implementing their quality management systems.

TRM process was split into five sub processes in order to facilitate the implementation of quality system. Such sub processes were defined taking account of the main functions developed by ARN in the branch of safe transport of radioactive materials and are listed below:

- 1- Development and updating of standards and regulatory guides,
- 2- Licensing of packages, special radioactive materials and consignments of radioactive materials,
- 3- Compliance assurance during the transport of radioactive materials, and
- 4- Training, advising and communications.

For each of these sub processes were specified their objectives, inputs, activities and outputs, the clients and stakeholders, responsibilities, supporting documents, control of documents and records, control of non-conformances, monitoring and measurements, audits, feedback and improvement.

It was decided to develop a quality plan to organize and manage activities to meet quality requirements, to optimize the use of limited resources of the organization and to be used as a basis for monitoring and assessing compliance with the requirements, both internal and external.

Supporting documents for sub processes were issued, validated, reviewed and improved as an essential point to implement continuous improving. Simultaneously, some indexes were defined to monitor and measure the sub processes as a way to show objective evidence of conformity with objectives.

Finally, as conclusions of this paper, they will be showed the main obstacles and troubleshooting found in the design and implementation of management system as well as their solutions and state of advance of the system.

**KEYWORDS:** *transport; radioactive material; management system; quality assurance.*