

INTEGRATION OF MANAGEMENT SYSTEM

**Regional Workshop on the development and implementation of effective IMS
based on GSR Part 2
Jakarta, Indonesia
31 July – 04 August 2023**

Regulatory Activities Section
Division of Nuclear Installation Safety (NSNI)
International Atomic Energy Agency (IAEA)
Department of Nuclear Safety & Security

Learning Objective

Understanding the integration of management system.

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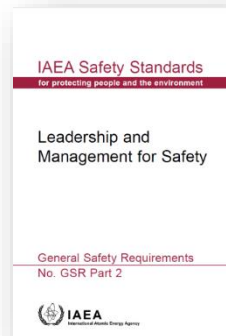
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1. Introduction

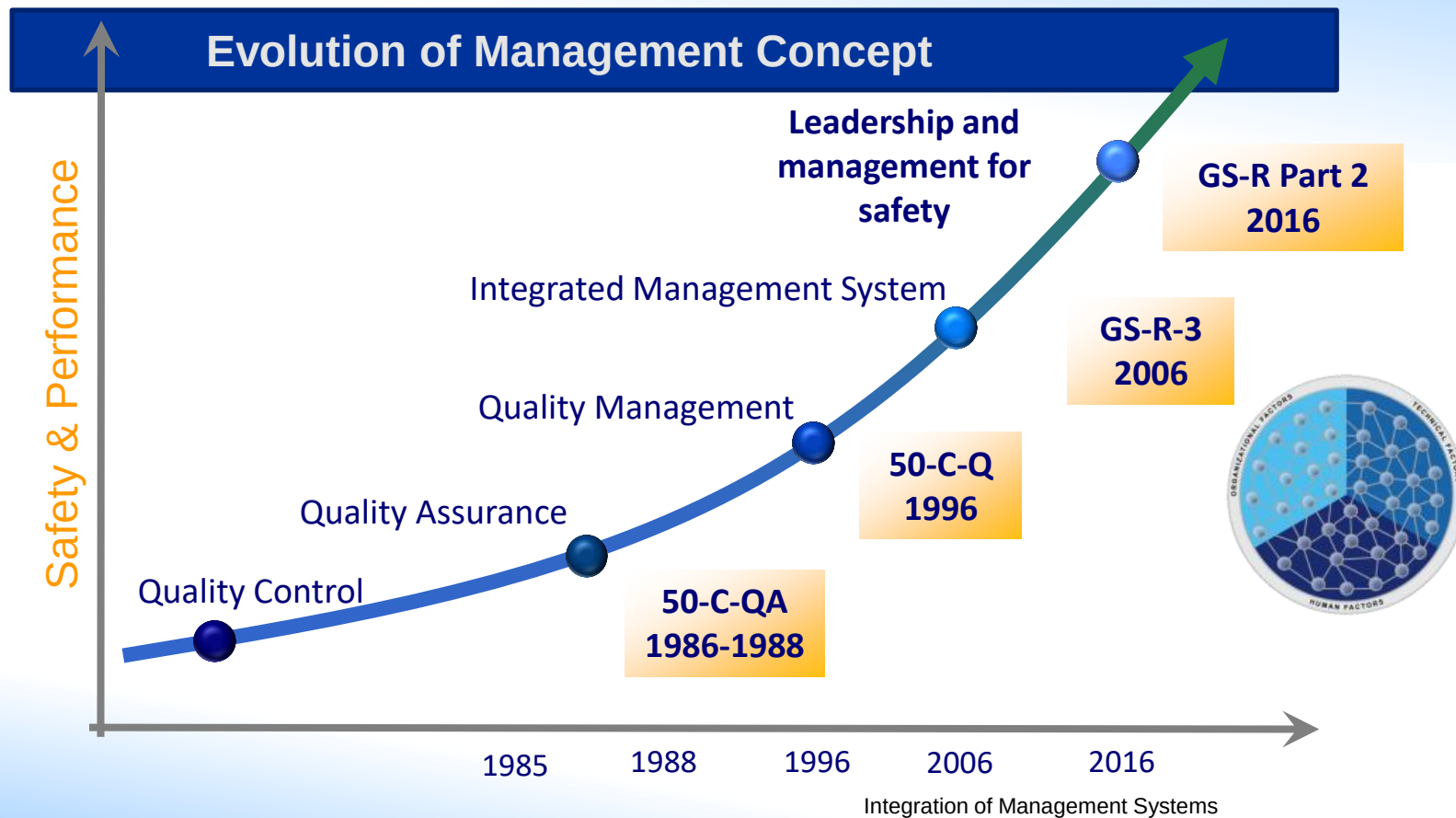
Requirement 6: Integration of the management system

- The management system shall integrate its elements, including safety, health, environmental, security, quality, human-and-organizational-factor, societal and economic elements, so that safety is not compromised.

- Means a single framework for arrangements and processes necessary to address organizational goals and requirements including:
 - **Safety**
 - Health
 - Environmental
 - Security
 - Quality
 - Economic
 - Other considerations such as social responsibility



1. Introduction



2. Management System requirements

A management system should be used to promote and support the enhancement and improvement of safety culture and the achievement of high levels of safety performance by

- Commitment to protection and safety
- Understanding of the key aspects of safety culture
- Supporting tasks carried out safely and successfully, taken in to account ITO interactions
- Participation in development and implementation of policies, rules and procedures dealing with protection and safety
- Accountability for protection and safety
- Open communication with regard to protection and safety
- Questioning and learning attitude and discouraging complacency Continuously developing and strengthening safety culture

2. Management System requirements

- **Documentation of the Management System should include:**
 - Policy statements on values and behavioural expectations
 - Fundamental safety objective
 - Descriptions of:
 - Organization and its structure
 - Responsibilities and accountabilities
 - Levels of authority, including all interactions of those managing, performing and assessing work for all processes
 - How the management system complies with regulatory requirements that apply to the organization the processes and supporting information; and
 - Interactions with external organizations and with interested parties

2. Management System Requirements

Achieving the fundamental safety objective

Leadership for Safety

Responsibility
of
Management

Management
of Resources

Process
Implementation

Measurement,
Assessment
and
Improvement

Safety Culture

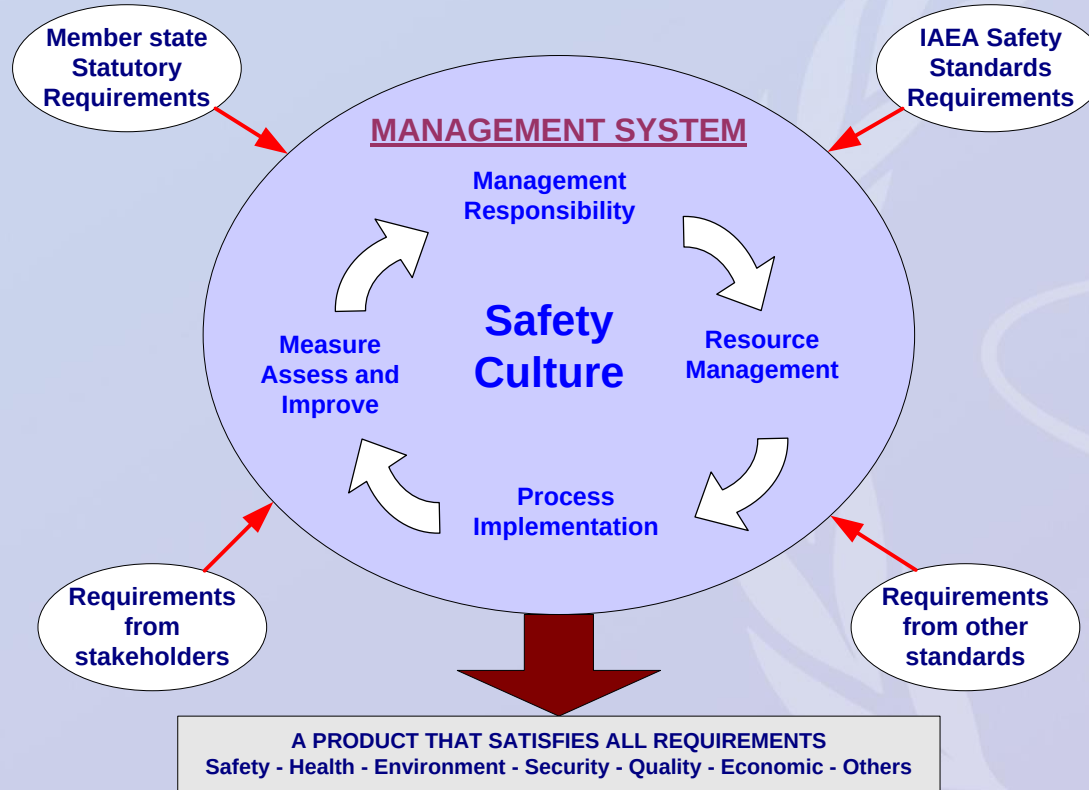


IAEA

International Atomic Energy Agency
Atoms for Peace and Development

2. Management System requirements

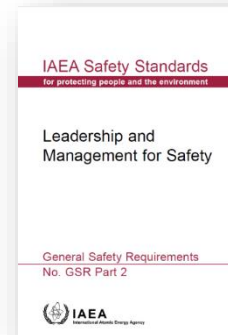
Management System Model



3. Integrating the management systems

Requirement 6: Integration of the management system

- The management system shall be applied to achieve goals safely, to enhance safety and to foster a strong safety culture by:
 - Bringing together in a coherent manner all the necessary elements for safely managing the organization and its activities
 - Describing the arrangements made for management of the organization and its activities
 - Describing the planned and systematic actions necessary to provide confidence that all requirements are met
 - Ensuring that safety is taken into account in decision making and is not compromised by any decisions taken



4. Grading the application of IMS requirements

The management system shall be developed and applied using a graded approach

- The criteria used to grade the development and application of the system shall be documented
- Following to be taken into account
 - Safety significance and complexity of the organization, operation of the facility or conduct of the activity;
 - Hazards and magnitude of the potential impacts (risks) associated with the safety, health, environmental, security, quality and economic elements of each facility or activity
 - Possible consequences for safety if a failure or an unanticipated event occurs or if an activity is inadequately planned or improperly carried out

4. Grading the application of IMS requirements

Grading the application of the management system requirements should enable valuable resources and attention to be targeted at the products or activities of greater significance

The proper use of graded approach can result in minimizing total costs while improving safety

4. Grading the application of IMS requirements

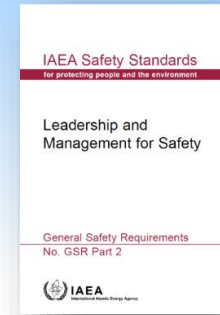
For the document and records management, examples of controls that could be graded:

- Preparation of documents and records
- Level of approval to which documents are subjected
- Document distribution (to whom and what way)
- Need to archive superseded documents
- Need to categorize, register, index, retrieve and store document records;
- Retention time of records

5. Management responsibility

Requirement 3: Responsibility of senior management for the management system

- Senior management shall be responsible for establishing, applying, sustaining and continuously improving a management system to ensure safety.
 - Senior management shall retain accountability for the management system even where individuals are assigned responsibility for coordinating the development, application and maintenance of the management system
 - Senior management shall be responsible for establishing safety policy



Senior Management has Prime Responsibility for the Management System

5. Management Responsibility

Senior management shall:

- Be responsible and accountable for the planning and implementation of the IMS
- Have responsibility for the effectiveness of the management system which should not be delegated
- Establish and cultivate principles that integrate all requirements into daily work
- Provide the individuals performing the work with the necessary information, tools, support and encouragement to perform their assigned work properly
- Communicate the beliefs that underlie the organization's policies through their own behaviour and management practices



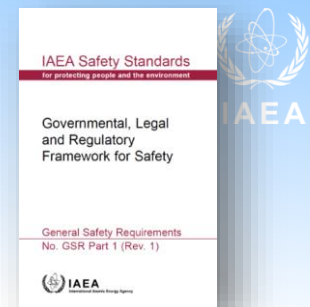
5. Management of Resources

GSR Pt2/ Req. 9: Provision of resources

- Senior management shall
 - Determine the competences and resources necessary to carry out the activities of the organization safely and shall provide them
 - Make arrangements to ensure that the organization has in-house, or maintains access to, the full range of competences and the resources necessary to conduct its activities and to discharge its responsibilities
 - determine which competences and resources has to be retained or developed internally, and which competences and resources may be obtained externally
 - Ensure that trainings are conducted and individuals have the required level of competence to perform their tasks safely and effectively
- In-house competences shall include: competences for leadership at all management levels; competences for fostering and sustaining a strong safety culture; and expertise to understand technical, human and organizational aspects in order to ensure safety
- Knowledge and information are managed as resources



6. Resources Management



...Basis: GSR Part 1 (rev 1) Requirement 35: Safety related records

- The regulatory body shall make provision for establishing, maintaining and retrieving adequate records relating to the safety of facilities and activities
 - The requirement for the regulatory body to maintain records cannot diminish the responsibility of authorized parties to keep their own records.
- The licensees are responsible to maintain their own records, including those for the safe operation of facilities and conduct of activities
- Applicants shall be responsible for ensuring the recording of information relating to facilities and activities in registers and inventories, and analysing it, where relevant, for the purposes of demonstrating safety
- The regulatory body shall use such records in support of its regulatory functions and to support the enforcement of regulatory requirements.

6. Resources Management

Safety-related Knowledge management (transfer, retention...):

- an integrated, systematic approach to identify, acquire, transform, develop, disseminate, use, share and preserve knowledge
- Involvement of individuals, processes, technology and focuses on individuals and organizational culture to stimulate and nurture the sharing and use of knowledge
 - on processes or methods to find, create, capture and share knowledge
 - on technology to store knowledge and make it available
- Knowledge retention mechanism when individuals are leaving the organization, should be properly developed and applied
 - Knowledge to be collected, recorded, transferred and shared.



6. Resources Management

Record management

- Requirements for the management of records, such as statutory obligations and standards, to be identified and understood to ensure to be addressed in the relevant management processes
- Responsibilities to manage records clearly defined and documented
- Records should be specified, prepared, authenticated and maintained as required
- Records should be properly stored and archived for the adequate duration
 - Legal and regulatory requirements
 - Management system requirements etc...

6. Resources Management

Human resources: Competence, awareness, training, Inspector specificity

- **Senior management should**
 - Determine the competence requirements for individuals, ensure that they are competent and understand the consequences for safety of their activities
 - Evaluate **present and expected needs for competences**, since loss of trained human capital may jeopardize the implementation and sustainability of the safety infrastructure
 - Commence the **education and training** in academic and vocational institutions of the number of persons necessary for ensuring safety

Note: Training shall ensure that individuals are aware of the relevance and importance of their activities and of how their activities contribute to safety in the achievement of the organization's objectives.

6. Resources Management

Infrastructure and the working environment

- The infrastructure includes resources such as workspace, equipment, support services, information and communication technology, and transport facilities

- **Senior management should:**
 - determine, provide, maintain and re-evaluate the infrastructure and the working environment
 - ensure it has a positive influence on the motivation, satisfaction and performance of individuals

Key messages

- **An integrated management system** provides a clear, holistic picture of all aspects of the organisation, how they affect each other, and their associated risks. There is less duplication, and it becomes easier to adopt new systems in the future where it :
 - covers all the requirements and processes from quality and environmental protection to occupational health, radiation safety, security, economic and social responsibility
- **Integration of management system provides:**
 - **Centralized Overview:** provides comprehensive transparency and clear control of all processes and procedures.
 - **Motivated Employees:** Transparent, processes provides higher level of acceptance among employees and support everyday work.
 - **Competitive Edge:** ensures that you will achieve your objectives and that your organization develops and improves continually.
 - **Efficient use of Resources:** benefits from management system integration by saving human resources, time and costs:
 - **Lean Documentation:** fewer documents mean a clearer view of processes
- An integrated management system should apply a graded approach
- A robust and effective Integrated Management System requires strong senior management commitments, responsibilities and management of resources.



Thank you!
Questions?

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