



IAEA

International Atomic Energy Agency

Establishment and Implementation of the 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



IAEA

International Atomic Energy Agency

Learning Objective

Introduction to the relevant requirements and recommendations to establish and implement a management system

Content

1. Introduction
2. Management commitment, responsibilities and roles
3. Phases in establishing the Integrated Management System (IMS)
 - Development Phase
 - Implementation Phase
 - Maintenance Phase
4. Key messages

1. Introduction

IAEA GSR Part 1

Requirement 19: The management system of the regulatory body:

The regulatory body shall establish, implement, assess and improve a management system that is aligned with its safety goals and contributes to their achievement



A

IAEA Safety Standards
for protecting people and the environment

Governmental, Legal
and Regulatory
Framework for Safety

General Safety Requirements
No. GSR Part 1 (Rev. 1)



1. Introduction

IAEA Safety Standards related to Regulatory Body IMS

IAEA Safety Standards
for protecting people and the environment

Governmental, Legal
and Regulatory
Framework for Safety

General Safety Requirements
No. GSR Part 1 (Rev. 1)



IAEA Safety Standards
for protecting people and the environment

Leadership and
Management for Safety

General Safety Requirements
No. GSR Part 2



IAEA Safety Standards
for protecting people and the environment

Application of
the Management System
for Facilities and Activities

Safety Guide
No. GS-G-3.1



IAEA Safety Standards
for protecting people and the environment

Organization, Management
and Staffing of the
Regulatory Body for Safety

General Safety Guide
No. GSG-12



IAEA Safety Standards
for protecting people and the environment

Functions and Processes
of the Regulatory Body
for Safety

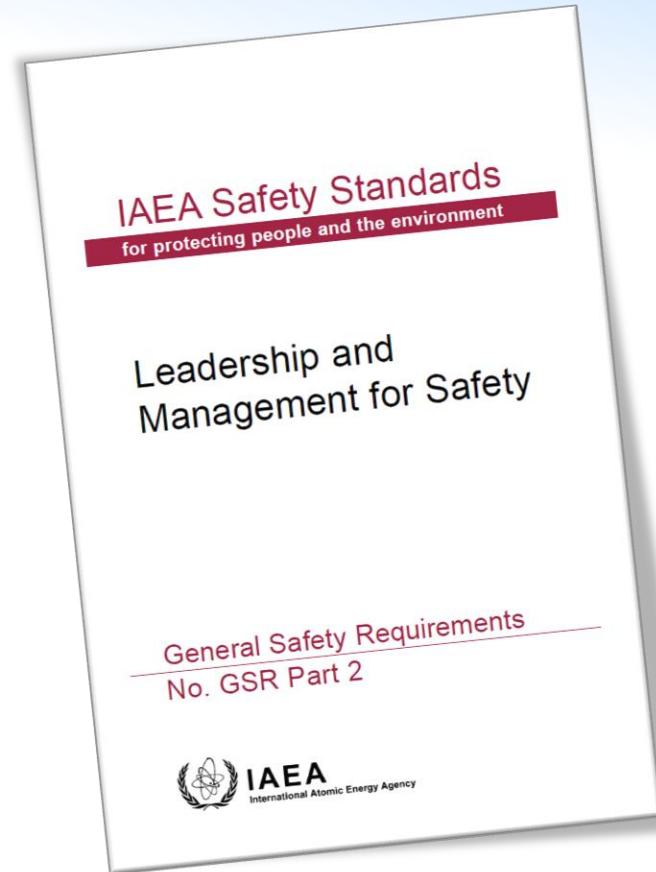
General Safety Guide
No. GSG-13



2. Management commitment, responsibilities and roles

GSR Part 2, Req. 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.



2. Management commitment, responsibilities and roles

Commitment of the senior management is essential for the development and implementation of a management system.

This means in practice:

- Establishment, applying, implementation, assessing and continual improvement is ensured
- Adequate resources are provided
- Development of an overall plan for establishing and implementing a management system is ensured
- Active visible senior management support and ownership, by actively participating in the implementation of the IMS and being a role models by being user of the IMS.

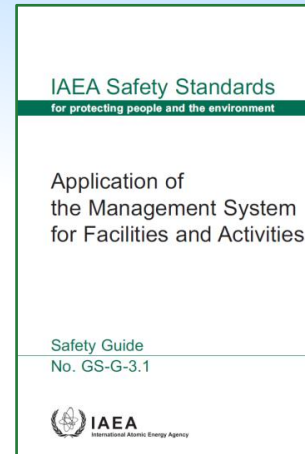
2. Management commitment, responsibilities and roles

- The implementation of a management system should be part of the organization's overall strategy
- Management system should cover the whole organization and its activities
- Development of management system is not a one man project
 - It needs to be a team approach – appropriate resources to implement the project will be required

2. Management commitment, responsibilities and roles



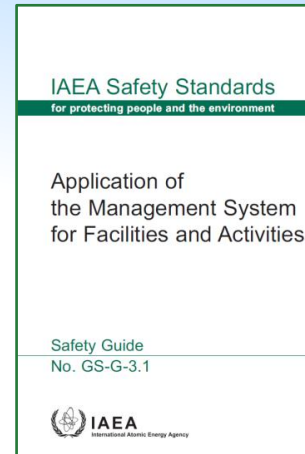
- Some Member States, the most senior position appoints a full time `management system manager`.
- Management system manager:
 - may be supported by a team composed of representatives from all organizational units
 - meets regularly with team to exchange experience and good practices and to resolve any problems or difficulties that arise during the development and implementation of the management system.
- Management system manager or individual who has responsibility for the management system should have the authority to raise issues relating to the management system at senior management meetings and to report on the status of corrective actions and improvements. If necessary, the individual should become involved in resolving any conflicts.



2. Management commitment, responsibilities and roles



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 (para 4.1 of GSR Part 2)



3. Phases in establishing the Integrated Management System (IMS)

- IAEA Safety standards require organizations to implement a management system and provide guidelines.

However:

- There is no one standard model or method to establish and implement a MS that fits all organizations and situations
- Numerous methods are available to establish and implement a MS
- Several IAEA documents provide additional practical guidances:
 - GSG12 Organization, Management and Staffing of the Regulatory Body for Safety, 2018
 - GSG13 Functions and Processes of the Regulatory Body for Safety, 2018
 - NG-T-1.3 Development and Implementation of a Process Based Management System provides additional practical guidance, 2015
 - GS-G-3.1 Application of the Management System for Facilities And Activities, 2006



3. Phases in establishing the Integrated Management System (IMS)



- Different status of the management system are being found at the regulatory bodies:
 - No management system in place
 - Management systems in place but not integrated
 - Existing managing system without using a process approach

3. Phases in establishing the Integrated Management System (IMS)

- Development phase
- Implementation phase
- Maintenance phase

IAEA Safety Standards

for protecting people and the environment

Organization, Management
and Staffing of the
Regulatory Body for Safety

General Safety Guide

No. GSG-12



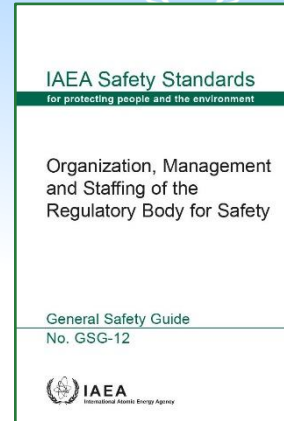
IAEA

International Atomic Energy Agency

3. Phases in establishing the Integrated Management System (IMS)



- At each of the three phases of an integrated management system, clear responsibilities should be assigned to the individuals and units involved. Leadership and oversight for the system should be assigned to an experienced member of staff.
- Senior management should allocate appropriate resources to develop, implement and maintain the integrated management system, including those needed for staff training.
- From the very beginning of the development phase, the regulatory body should designate a member of staff with professional knowledge of integrated management systems as the '**management system manager**', who should report directly to senior management. Management System Manager is normally also assigned as 'the project manager' during the development phase.



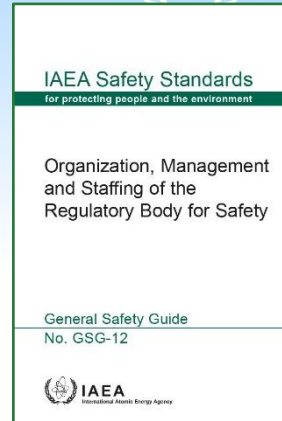
3. Phases in establishing the Integrated Management System (IMS)



The regulatory body should use **a project management approach** for the development and implementation of the IMS. The IMS should be developed in line with the mission of the regulatory body, by individuals familiar with process development and project management.

The regulatory body should consider **assigning a project manager** to lead a team that includes staff with knowledge of regulatory responsibilities, supported by internal or, if necessary, external expertise in the design of integrated management.

The project manager should have sufficient authority and should have direct access to the management system manager (in case they are different persons!) and senior management.



3. Phases in establishing the Integrated Management System (IMS)



The project manager

- To prepare a plan (usually called `Implementation Plan`) to achieve full implementation of a management system as scheduled in the plan (the plan should be approved by the top management)
- To manage the project activities and to do the monitoring
- To have the authority to raise issues at senior management level and to report on corrective and improvement actions
- May be supported by a team composed of representatives of all organizational units

4. Development phase

The regulatory body may request an external organisation assistance in the development of the management system

- If so, care should be taken to ensure that the management system is relevant to the objectives of the regulatory body and addresses the actual processes of the organization
- It is most relevant that personnel of regulatory body participates actively in the development work. Through this kind of a role, understanding and commitment of personnel can be achieved

End result: the RB is still fully responsible for the development and implementation of the IMS

4. Development phase

Actions to be taken

- Obtaining top management commitment
- Appointing a senior management as the project manager and/or the management system manager responsible for establishing and implementing the IMS.
- Evaluating the current situation: Nothing, something, QA or QM
- Identifying the gaps regarding having a full complete IMS
- Identifying the inputs and resources needed to fill the gaps
- Assigning the Development Team Members under the Project Manager supervision

4. Development phase

Actions to be taken (continue)

- Training and orientation of the Development Team Members in order to ensure the Development Team understands the organization, IMS related requirements and compliance expectations.
- Preparing a plan regarding establishment and implementation of the IMS of the regulatory body
- Communicating the plan to personnel and ensure regular communication and coordination during the development phase
- Implementing the plan and monitoring and reporting the project work progress

4. Development phase

A typical Implementation Plan normally consist the following items:

- Introduction, purpose and scope
- Project team organizational structure
- Project team responsible for establishment and implementation of the management system
- Organizational units/departments/ groups/specialists tasks and responsibilities in the development and implementation of the MS
- Schedule, timelines and milestones
- Project resource requirements/recruitments regarding the management system development and implementation
- Training requirements (e.g process owners, internal auditors and other stakeholders)
- List of identified processes and procedures
- List of process owners
- Implementation schedule of single project activities for the development of the IMS
- Process rollout and training for implementation/use of the IMS
- Implementation monitoring and oversight (evaluation, lessons learned and resolutions)

4. Development phase

- **The implementation plan** should include provisions for:
 - Recruiting, selecting, training, assigning and retraining adequate numbers of individuals, in a manner consistent with schedules for implementation and workloads
 - Consideration should be given to needs for special skills and training

Establishment of a management system demands the collaborative efforts of all managers

4. Development phase

- The implementation plan should be developed on the basis of a gap analysis if there is an management system already exist in the organization.
- Gap analysis identifies gaps between actual status of the existing management system and desired performance.
- Gap analysis enables prioritization of needed activities.
- Areas for improvement can then be identified and a strategy is defined for developing the missing process and its supporting documentation.
- The implementation plan should be subjected to approval and monitoring by the most senior management level.

5. Implementation phase

- The implementation phase of IMS involves deployment of the processes in a planned and systematic way
- Process owners play a central role
- Communication of the principles of IMS in general as well as processes and dissemination of the IMS documents
- Training of the staff to ensure that they fully understand the IMS and can use the relevant documents effectively.
- The use of the established IMS for daily work of all individuals in the RB
- Managers should ensure that processes are applied reliably across the RB

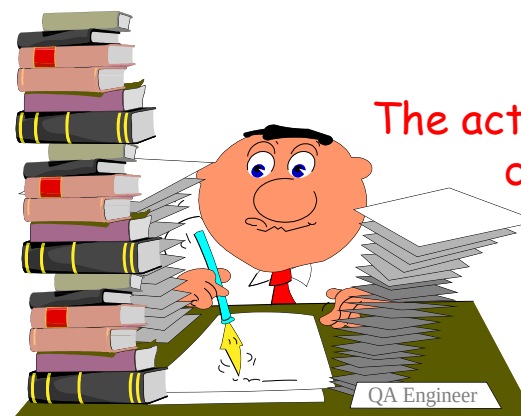
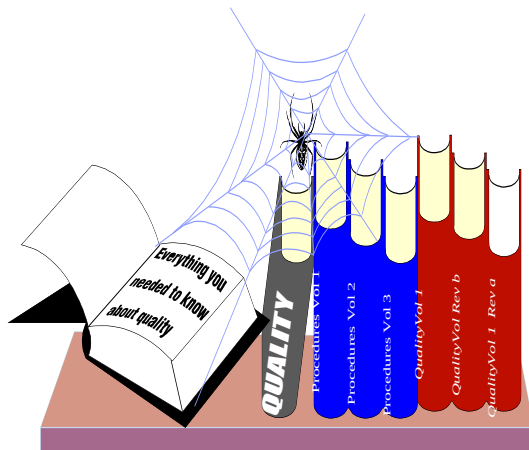
6. Maintenance phase

- The process owner plays a key and central role
- Processes should be regularly monitored through evaluation of process documents, audits, management system reviews
- Opportunities for improvements should be identified

7. Key messages

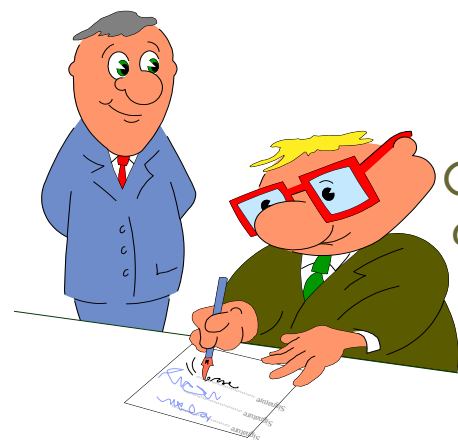
Often observed, but should be avoided

Quality Manuals & Procedures sit on shelves.



The actual production of documents is seen as the primary objective

Quality! This is the role of Quality Department



Quality is only about obtaining signatures

7. Key messages

- Establishment and implementation of a management system is of key importance for an effective Regulatory Body and need to be carefully planned based on a clear strategy
- Commitment of the senior management is essential for the establishment and implementation of a successful management system
- The organization should continuously improve its performance. The management system is one area where organizations may look for continual improvement opportunities



IAEA

International Atomic Energy Agency

Thank you!

