The IAEA Safety Standards - Leadership and Management for Safety
Safety Standards Hierarchy

Global reference for a high level of nuclear safety
Integrated management systems

Principle 3: Leadership and management for safety

3.12. “...Safety has to be achieved and maintained by means of an effective management system. This system has to integrate all elements of management so that requirements for safety are established and applied coherently with other requirements, including those for human performance, quality and security, an that safety is not compromised by other requirement or demands. The management system also has to ensure the promotion of a strong safety culture...”
Integrated management systems

Pierre can you add one more slide from SF1 addressing key aspects of Leadership and management

Principle 3: Leadership and management for safety

3.12. “…Safety has to be achieved and maintained by means of an effective management system. This system has to integrate all elements of management so that requirements for safety are established and applied coherently with other requirements, including those for human performance, quality and security, an that safety is not compromised by other requirement or demands. The management system also has to ensure the promotion of a strong safety culture…”
3.14. “An important factor in a management system is the recognition of the entire range of interactions of individuals at all levels with technology and with organizations. To prevent human and organizational failures, human factors have to be taken into account and good performance and good practices have to be supported.”
<table>
<thead>
<tr>
<th>General Safety Requirements</th>
<th>Specific Safety Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1 Governmental and Regulatory Framework</td>
<td>1. Site Evaluation for Nuclear Installations</td>
</tr>
<tr>
<td>Part 2 Leadership and Management for Safety</td>
<td>2. Safety of Nuclear Power Plants</td>
</tr>
<tr>
<td>Part 3 Radiation Protection and Safety of Radiation Sources</td>
<td>2.1 Design and Construction</td>
</tr>
<tr>
<td>Part 4 Safety Assessment</td>
<td>2.2 Commissioning and Operation</td>
</tr>
<tr>
<td>Part 6 Decommissioning and Termination of Activities</td>
<td>4. Safety of Nuclear Fuel Cycle Facilities</td>
</tr>
<tr>
<td></td>
<td>6. Safe Transport of Radioactive Material</td>
</tr>
</tbody>
</table>

IAEA
## General Safety Requirements

- Part 1 Governmental and Regulatory Framework
- Part 2 Leadership and Management for Safety
- Part 3 Radiation Protection and Safety of Radiation Sources
- Part 4 Safety Assessment
- Part 5 Predisposal Management of Radioactive Waste
- Part 6 Decommissioning and Termination of Activities
- Part 7 Emergency Preparedness and Response

## Specific Safety Requirements

1. Site Evaluation for Nuclear Installations
2. Safety of Nuclear Power Plants
   - 2.1 Design and Construction
   - 2.2 Commissioning and Operation
3. Safety of Research Reactors
4. Safety of Nuclear Fuel Cycle Facilities
5. Safety of Radioactive Waste Disposal Facilities
6. Safe Transport of Radioactive Material
Continually Improving Global Nuclear Safety

Quality Control

Quality Assurance

Quality Management

(Systemic approach)

(Integrated) Management Systems

GS-R-3 2006

GSR Part 2 2013

50-C-QA 1985-88

50-C-Q 1996

Safety & Performance

Time
Objective of the GS-R Part 2

Leadership and Management for Safety

- The application of SF-1 to establish requirements for:
  - Effective leadership for safety
  - Effective management for safety
  - Effective safety culture improvement activities
- Safety as a sustainable outcome of excellence in leadership and management
- Integrated management system: make sure that other requirements will not compromise Nuclear Safety
- Systemic approach of ITO
Systemic Approach to Safety – The Interaction between Individuals, Technology and Organization
“The difference between management and leadership can be stated simply whereby ‘management’ is a **function** and ‘leadership’ is a **relation**. Management ensures that work is completed in accordance with requirements, plan and resources. It is through leadership that individuals may be influenced and motivated, and organizations changed. Managers may also act as leaders.”

Source: IAEA Safety Standards: GS-G-3.5
Manager or Leader?

Management = a function
- Planning/Budgeting
- Organizing/Staffing
- Task Distribution/Follow-up
- Controlling/Problem Solving

Leadership = a relationship
- Create shared understanding
- Establishing Direction
- Aligning People
- Motivating and Inspiring

To manage means to accomplish activities and master routines, while to lead means to influence others and create shared understanding as driver for change.
Safety Standards Hierarchy

Global reference for a high level of nuclear safety
Pierre do you like to add something related to GS-R-3
Safety Standards Hierarchy

- Safety Fundamentals
- Safety Requirements
- Safety Guides
- Safety Reports

Global reference for a high level of nuclear safety
Pierre do you like to add something related to GS-G-3
Safety Standards Hierarchy

Global reference for a high level of nuclear safety
…Thank you for your attention