



IAEA

International Atomic Energy Agency

Atoms for Peace



IAEA's Safety Standards on Leadership, Management and Culture for Safety

Стандарты МАГАТЭ по Лидерству, Руководству и Культуре в целях Безопасности

GSR Part 2

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Definition of safety culture

Понятие «Культуры безопасности»

“Safety Culture is that assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, protection and safety issues receive the attention warranted by their significance”.

“Культура безопасности - это совокупность характеристик и отношений в организациях и между отдельными людьми, который устанавливает, что защищенность и безопасность являются важнейшими приоритетами, которым уделяется внимание, соответствующее их значимости”.

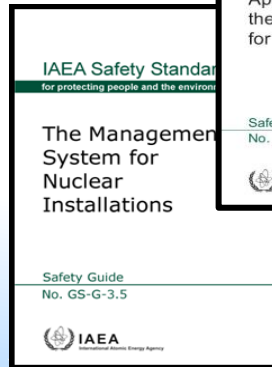
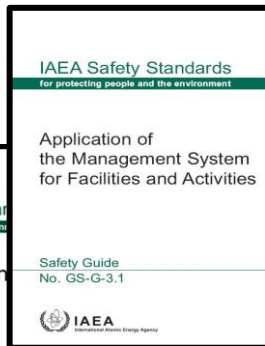
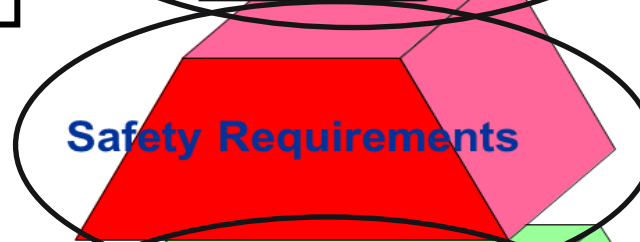
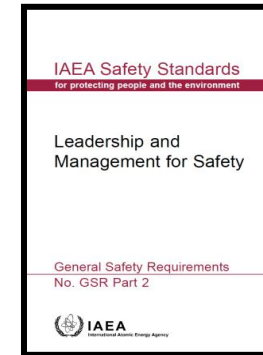
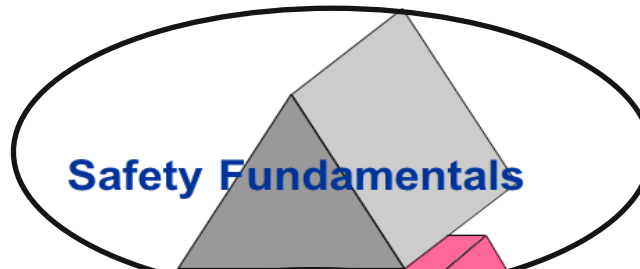
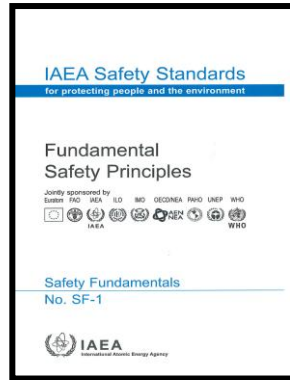
Organizational & cultural root causes of significant events:

Организационные и культурные причины значимых событий

- Insufficient understanding of the complexity of 'reality' by leaders ('good news' cultures, failure to encourage constructive challenge, compartmentalization)
- Insufficient connection and integration across and with contractor/vendor network
- Insufficient understanding of nuclear/process safety issues in decision-making and actions
- Normalisation of abnormal conditions or deviations
- Failure to learn from previous events and experiences – distancing through differencing
- Complacency
- Inability to invite the full intelligence of the organizational members into improvement processes
- Inadequate systemic approach to safety in oversight and supervision

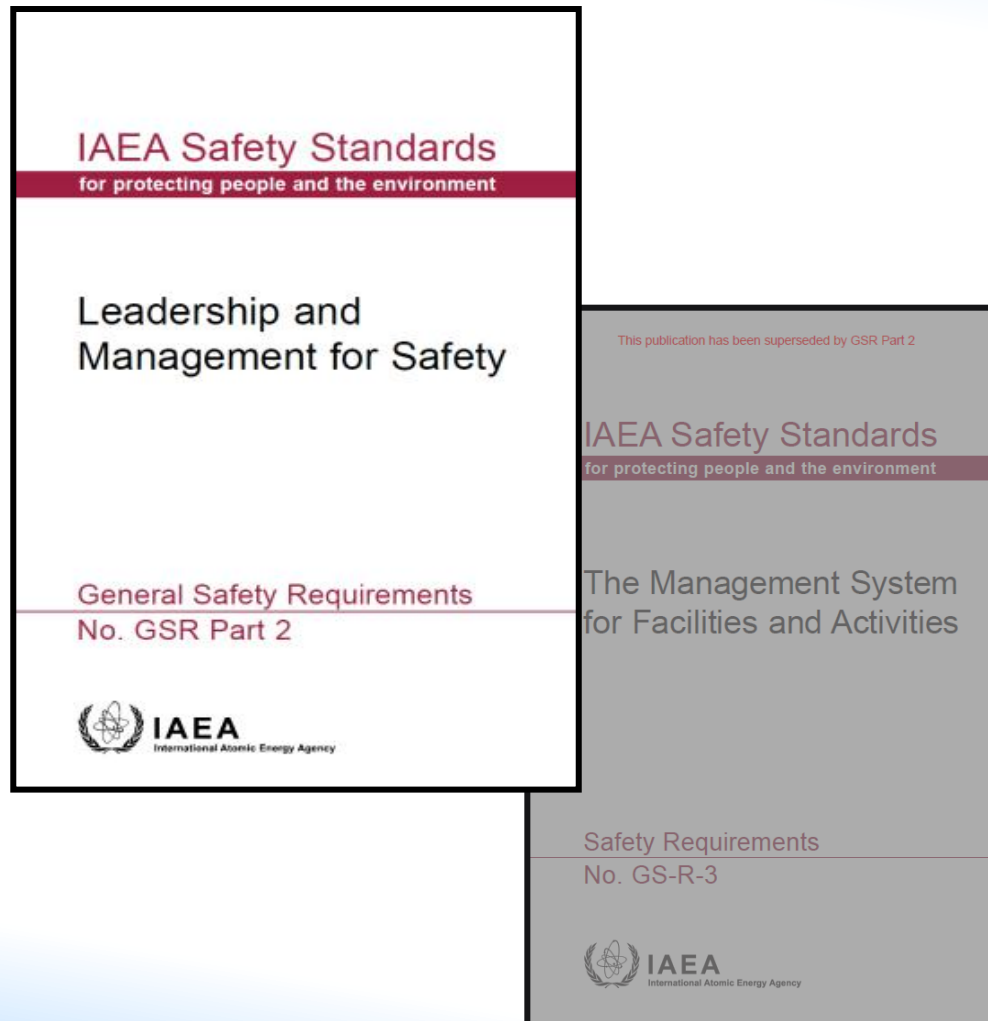
An attempt to learn from the past - the IAEA Safety Standards

Попытка извлечь уроки из прошлого



GSR Part 2 supersedes GS-R-3 and was published in June 2016

GSR Part 2 заменяет GS-R-3 и был опубликован в июне 2016 года

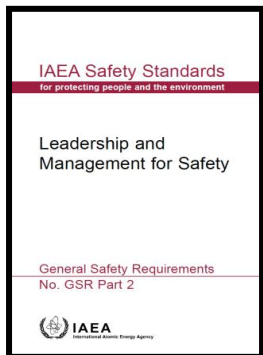


What's new and/or changed in GSR Part 2?

Что нового и / или изменилось в GSR Part 2?



- Clarifies the application to all types of installations, lifecycles and sizes of organisations
- Emphasizes that a **systemic approach to safety** is one essential element to foster a strong safety culture
- Clarifies the requirements on Leadership for safety
- Recognises the key influence of Senior Management
- Contains enhanced details of the safety culture requirements
- Has links to Emergency preparedness & Security standards
- Includes more explicit supply chain requirements



Most things stated above were mentioned in GS-R-3 but GSR Part 2 includes are more detailed or slightly changed perspective due to the lessons learned over the years. For example, lessons arising from the Fukushima-Daiichi event were incorporated.

Большинство вещей, о которых говорилось выше, упоминалось в документе GS-R-3, но GSR Part 2 включает более подробную или немного измененную перспективу из-за уроков, извлеченных за прошедшие годы. Например, были учтены уроки, извлеченные в ходе мероприятия на Фукусиме

GSR Part 2 Requirements

Требования GSR Part 2

1. Achieving the fundamental safety objective
2. Demonstration of leadership for safety
3. Responsibility of senior management for the management system
4. Goals, strategies, plans and objectives
5. Interaction with interested parties
6. Integration of the management system
7. Application of the graded approach to the management system
8. Documentation of the management system
9. Provision of resources
10. Management of processes and activities
11. Management of the supply chain
12. Fostering a culture for safety
13. Measurement, assessment and improvement
14. Measurement, assessment and improvement of leadership for safety and safety culture

General safety Culture requirements

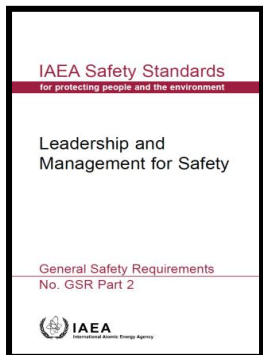
Общие требования к культуре безопасности



GSR Part 2, Requirement 12: Individuals in the organization, from senior managers downwards, shall foster a strong safety culture. The management system and leadership for safety shall be such as to foster and sustain a strong safety culture.

5.2. Senior managers and all other managers shall advocate and support the following:

- A **common understanding** of safety and of safety culture, including: awareness of radiation risks and hazards relating to work and to the working environment; an understanding of the significance of radiation risks and hazards for safety; and a collective commitment to safety by teams and individuals;
- Acceptance by individuals of **personal accountability** for their attitudes and conduct with regard to safety;
- An organizational culture that supports and encourages **trust, collaboration, consultation and communication**;
- The **reporting of problems** relating to technical, human and organizational factors and reporting of any deficiencies in structures, systems and components to avoid degradation of safety, including the timely acknowledgement of, **and reporting back of, actions taken**;
- Measures to encourage a **questioning and learning attitude** at all levels in the organization and to discourage complacency with regard to safety;
- The means by which the organization seeks to enhance safety and to foster and sustain a strong safety culture, and using a **systemic approach** (i.e. an approach relating to the system as a whole in which the interactions between technical, human and organizational factors are duly considered);
- Safety oriented **decision making** in all activities;
- The exchange of ideas between, and the combination of, **safety culture and security culture**.



Safety Culture requirements on assessment

Требования к культуре безопасности при оценке

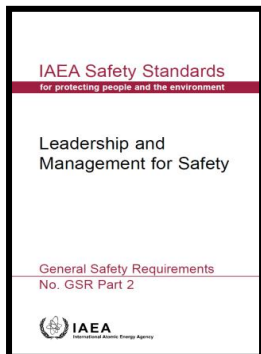


GSR Part 2, Requirement 14: Senior management shall regularly commission assessments of leadership for safety and of safety culture in its own organization.

6.9. Senior management shall ensure that self-assessment of leadership for safety and of safety culture includes assessment at all organizational levels and for all functions in the organization. Senior management shall ensure that such self-assessment makes use of recognized experts in the assessment of leadership and of safety culture.

6.10. Senior management shall ensure that an independent assessment of leadership for safety and of safety culture is conducted for enhancement of the organizational culture for safety (i.e. the organizational culture as it relates to safety and as it fosters a strong safety culture in the organization).

6.11. The results of self-assessments and independent assessments of leadership for safety and of safety culture shall be communicated at all levels in the organization. The results of such assessments shall be acted upon to foster and sustain a strong safety culture, to improve leadership for safety and to foster a learning attitude within the organization.



Safety Standard GS-G-3.5: Assessment of safety culture

Оценка культуры безопасности в соответствии с GS-G-3/5

*A safety culture **self-assessment** should:*

- Include the entire organization
- Several different self-assessment tools should be used (e.g. interviews, focus groups, questionnaires, observations and document reviews)
- A designated team representing all organizational levels and functions at the installation should carry out the self-assessment
- A specialist in safety culture should be included in the team
- The self-assessment team should receive training
- The self-assessment team should summarize the results and identify areas for improvement and may suggest actions to be taken
- The results should be reported to the management at an appropriate level
- A follow-up assessment should be performed

The **independent** assessment of safety culture should follow a similar approach

IAEA Safety Standards
for protecting people and the environment

The Management
System for
Nuclear
Installations

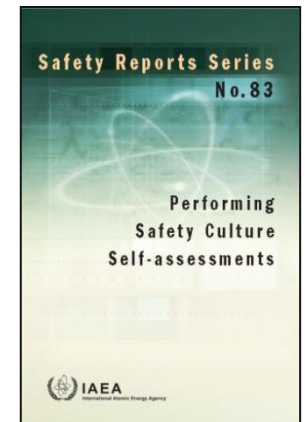
Safety Guide
No. GS-G-3.5



IAEA support

Поддержка со стороны МАГАТЭ

- IAEA provides training on how to implement a Safety Culture Self-Assessment (SCSA) methodology
- IAEA provides Independent Safety Culture Assessments with a multidisciplinary team on the request from the licensee or the regulatory body
- Safety Report No 83 presents the IAEA Safety Culture Self-Assessment methodology. The same methodology is being used for Independent Safety Culture Assessments.



More about Safety culture in the IAEA publications

Публикации МАГАТЭ по Культуре Безопасности <http://www.iaea.org>

Document	Title
Safety Fundamentals No. SF-1	Fundamental Safety Principles
Safety Requirements GSR Part 1	Government, Legal and Regulatory Framework for Safety
Safety Requirements GSR Part 2	Leadership and Management for Safety
Safety Guide No. GS-G-3.1	Application of the Management System for Facilities and Activities
Safety Guide No. GS-G-3.5	The Management System for Nuclear Installations
Safety Guide No. SSG-16	Establishing the Safety Infrastructure for a Nuclear Power Programme
Safety Series No. 75-INSAG-4	Safety Culture
Safety Series No. 75-INSAG-15	Key Practical Issues in Strengthening Safety Culture
Safety Report Series No. 11	Developing Safety Culture in Nuclear Activities
Safety Report Series No. 42	Safety Culture in the Maintenance of Nuclear Power Plants
Safety Report Series No 74	Safety Culture during Pre-Operational Phases
Safety Report Series No 83	Performing Safety Culture Self-Assessment (2016)
Services Series 32	OSART Independent Safety Culture Assessment (ISCA) Guidelines (2016)
Safety Report Series	Continuously Improving Culture for Safety in nuclear installations - draft
TECDOC-1321	Self-assessment of safety culture in nuclear installations
TECDOC-1329	Safety culture in nuclear installations
TECDOC-1707	Regulatory Oversight Of Safety Culture In Nuclear Installations



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