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International Atomic Energy Agency
Atoms for Peace and Development

The IAEA Safety Standards and the Joint Convention

*Regional Workshop on Communication and Consultation
Regarding Issues Related to Radioactive Waste Management*

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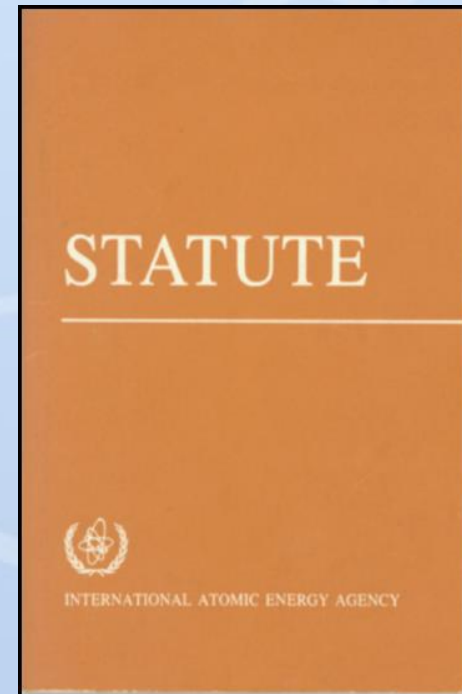
Statutory Obligations (1957)

Article III, *Functions* Paragraph A.6.

“ To **establish or adopt**, in consultation and, where appropriate, in collaboration with the competent organs of the United Nations and with the specialized agencies concerned,

standards of safety for protection of health and minimization of danger to life and property (including such standards for labour conditions), and

to provide for the application of these standards to its own operation as well as to the operations making use of materials, services, equipment, facilities, and information made available by the Agency ...; “



**IAEA Statute
- 1957**

SAFETY FUNDAMENTALS

General Safety Requirements

Vol.1 Governmental and
Regulatory Framework

Vol.2 Leadership and Management
for Safety

Vol.3 Radiation Protection and
Safety of Radiation Sources

Vol.4 Safety Assessment

Vol.5 Predisposal Management
of Radioactive Waste

Vol.6 Decommissioning and
Termination of Activities

Vol.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

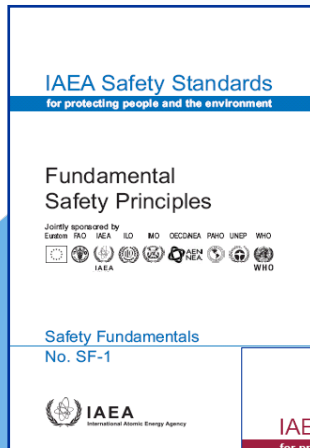
4. Safety of Nuclear Fuel
Cycle Facilities

5. Safety of Radioactive Waste
Disposal Facilities

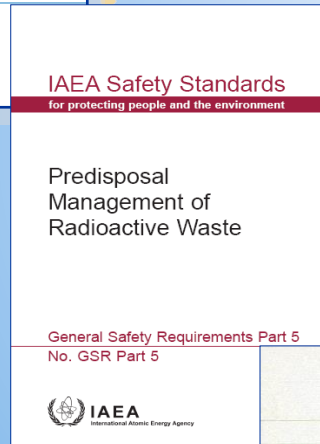
6. Safe Transport of
Radioactive Material

Collection of Safety Guides

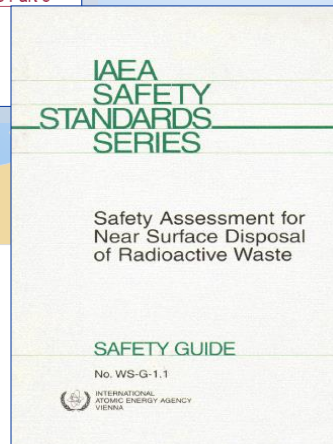
IAEA Safety Standards Categories



Fundamental Safety Principles



Requirements – Legal, Technical, & Procedural Safety Imperatives



Guidance on Best Practice to Meet Requirements

Safety Fundamentals

Safety Requirements

Safety Guides

Status of Safety Standards

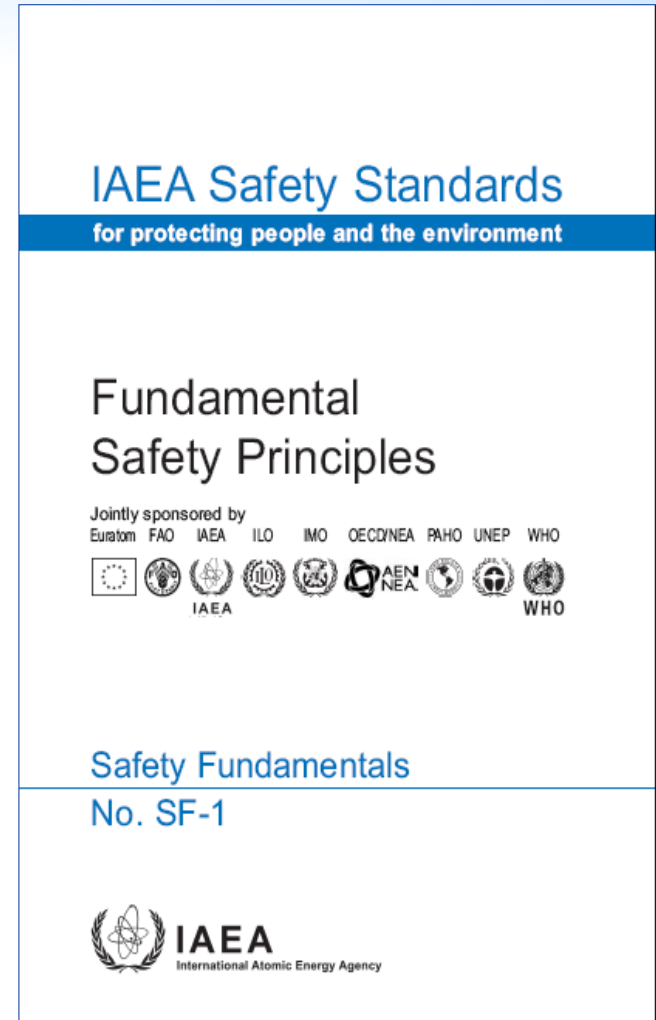


- IAEA Safety standards are
 - **Binding** for IAEA's own activities
 - **Not binding** on the Member States (but may be adopted by them) **EXCEPT** in relation to operations assisted by the IAEA:
 - Integrated Regulatory Review Service
 - Technical Cooperation Fund work
 - States wishing to enter into project agreements with the IAEA

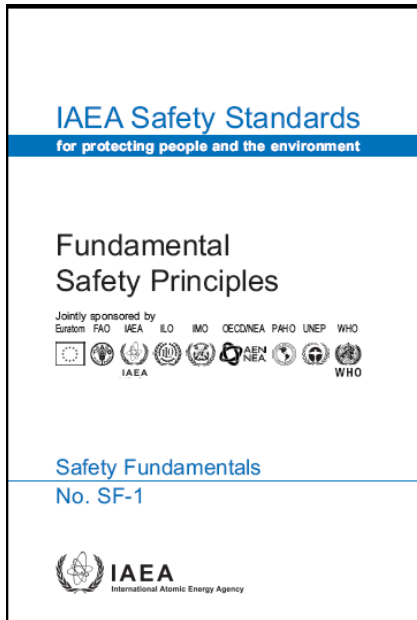
Safety Fundamentals



- **Policy document** of the IAEA Safety Standards Series:
 - States the **basic objectives, concepts and principles** involved in ensuring protection and safety
 - Comprised of 1 objective and 10 safety principles
 - **Objective:** Protect People and the Environment from the Harmful Effects of Ionizing Radiations



Safety fundamentals

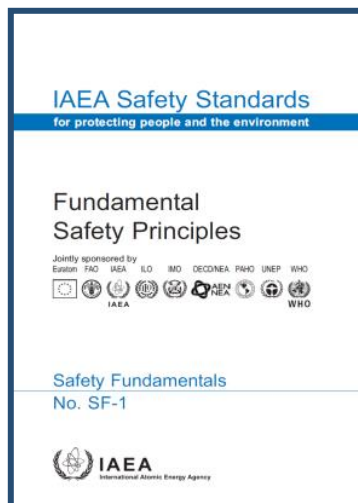


- Responsibility for safety
- Role of government
- Leadership and management for safety
- Justification of facilities and activities
- Optimisation of protection
- Limitation of risks to individuals
- **Protection of present and future generations**
- Prevention of accidents
- Emergency preparedness and response
- Protective actions to reduce existing or unregulated radiation risks

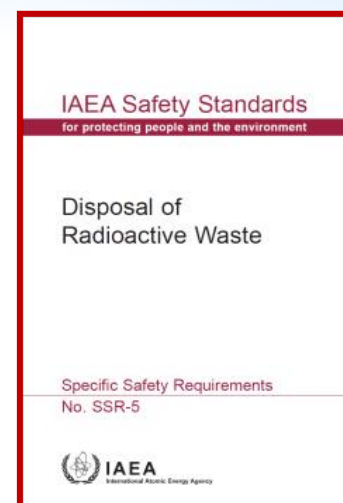
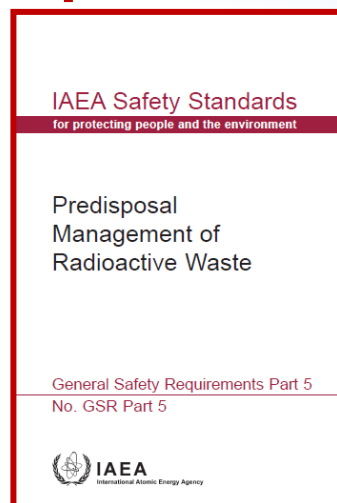
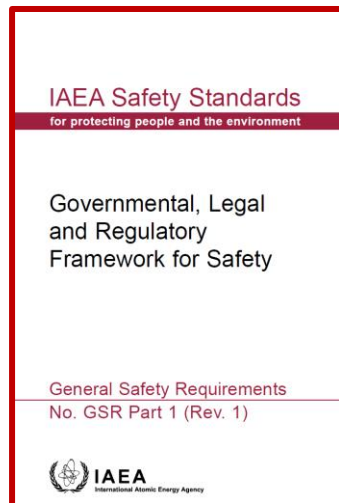
Safety Standards for Radioactive Waste



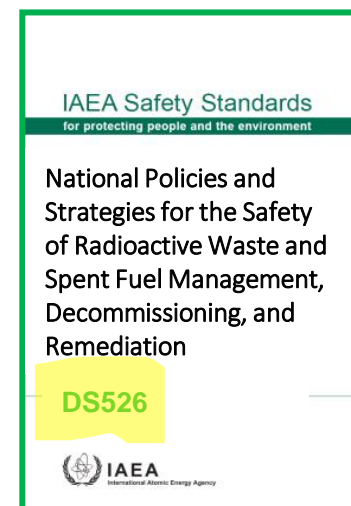
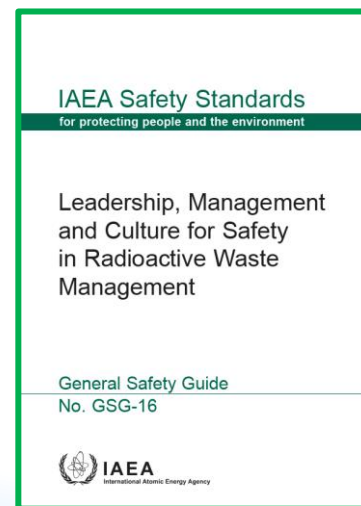
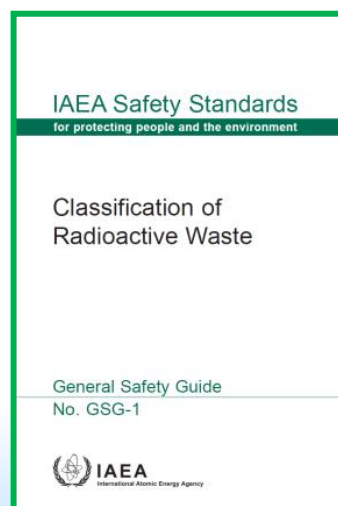
Principles



Requirements



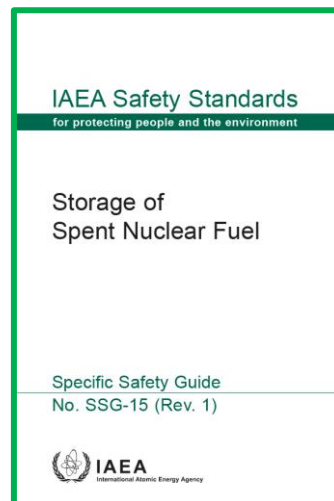
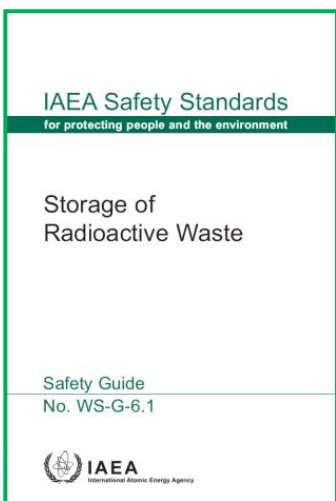
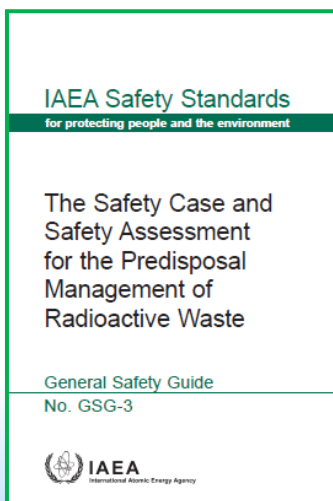
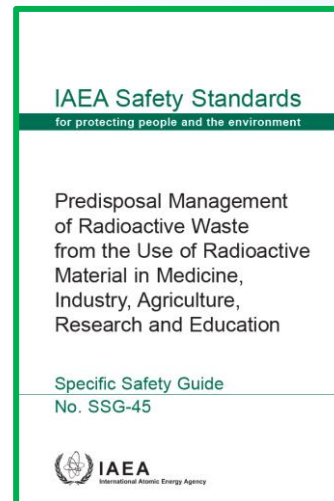
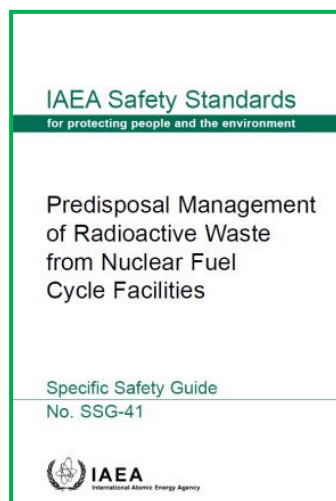
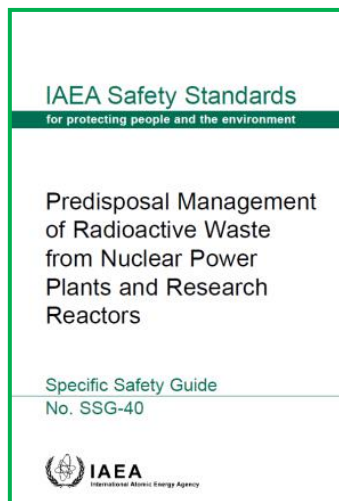
General Safety Guides



Safety Standards for Radioactive Waste

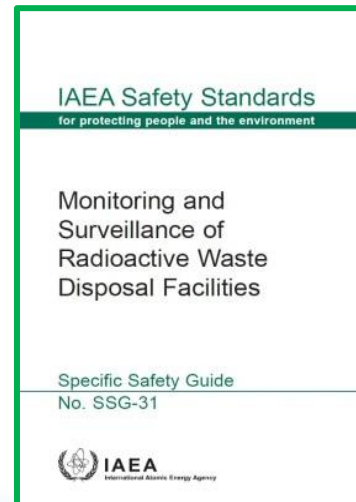
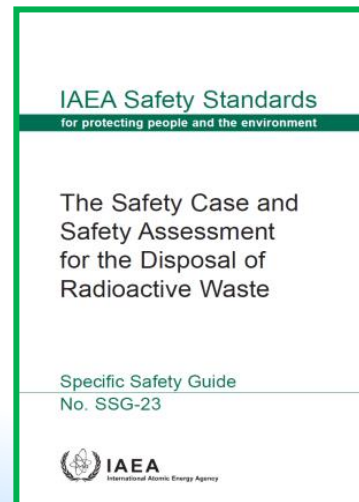
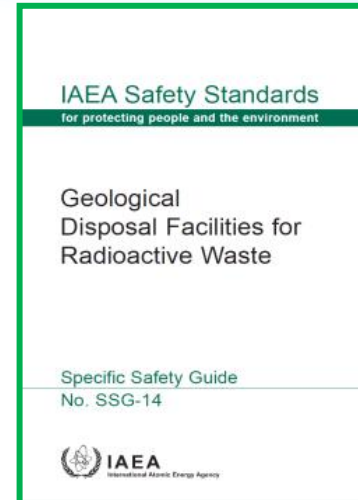
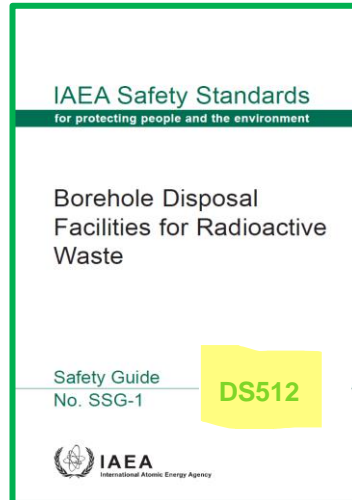
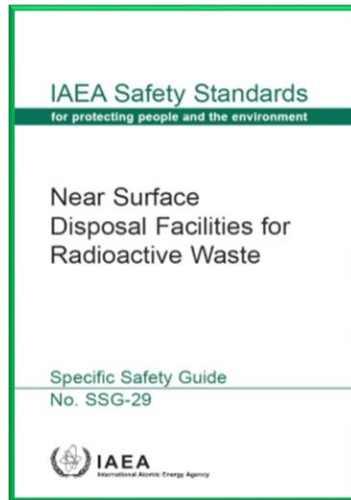


Specific Safety Guides: Predisposal Management



Safety Standards for Radioactive Waste

Specific Safety Guides: Disposal



Planned Safety Standards



- **For the term 2021-2023**

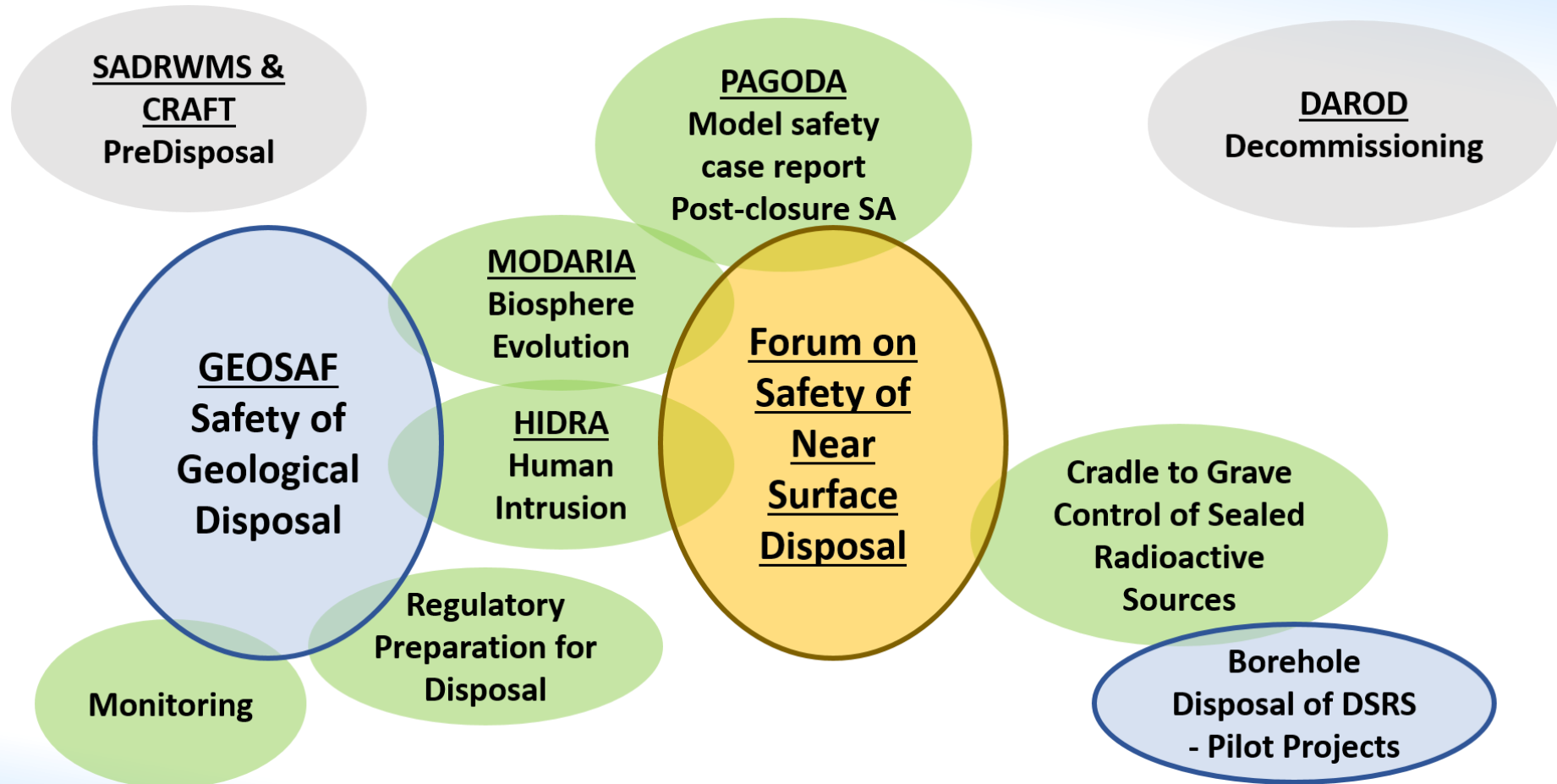
- GSR Part 5: SR predisposal management of radioactive waste - 2009
- WS-G-6.1: SG Storage of Radioactive Waste - 2006
- GSG-3: SG SC/SA for the predisposal management of RW - 2013

- **In the mid-term plan**

"Given the work currently underway, any new standards or revision initiated as a result of the above review could start to be issued from 2026/2027.")

- GSG-1: Classification of RW - 2009
- SSR-5: SR Disposal of RW - 2011
- SSG-29: SG Near Surface Disposal Facilities for RW - 2014
- SSG-23: SG on SC/SA for the Disposal of RW - 2012
- SSG-14: SG on Geological Disposal Facilities for RW – 2011

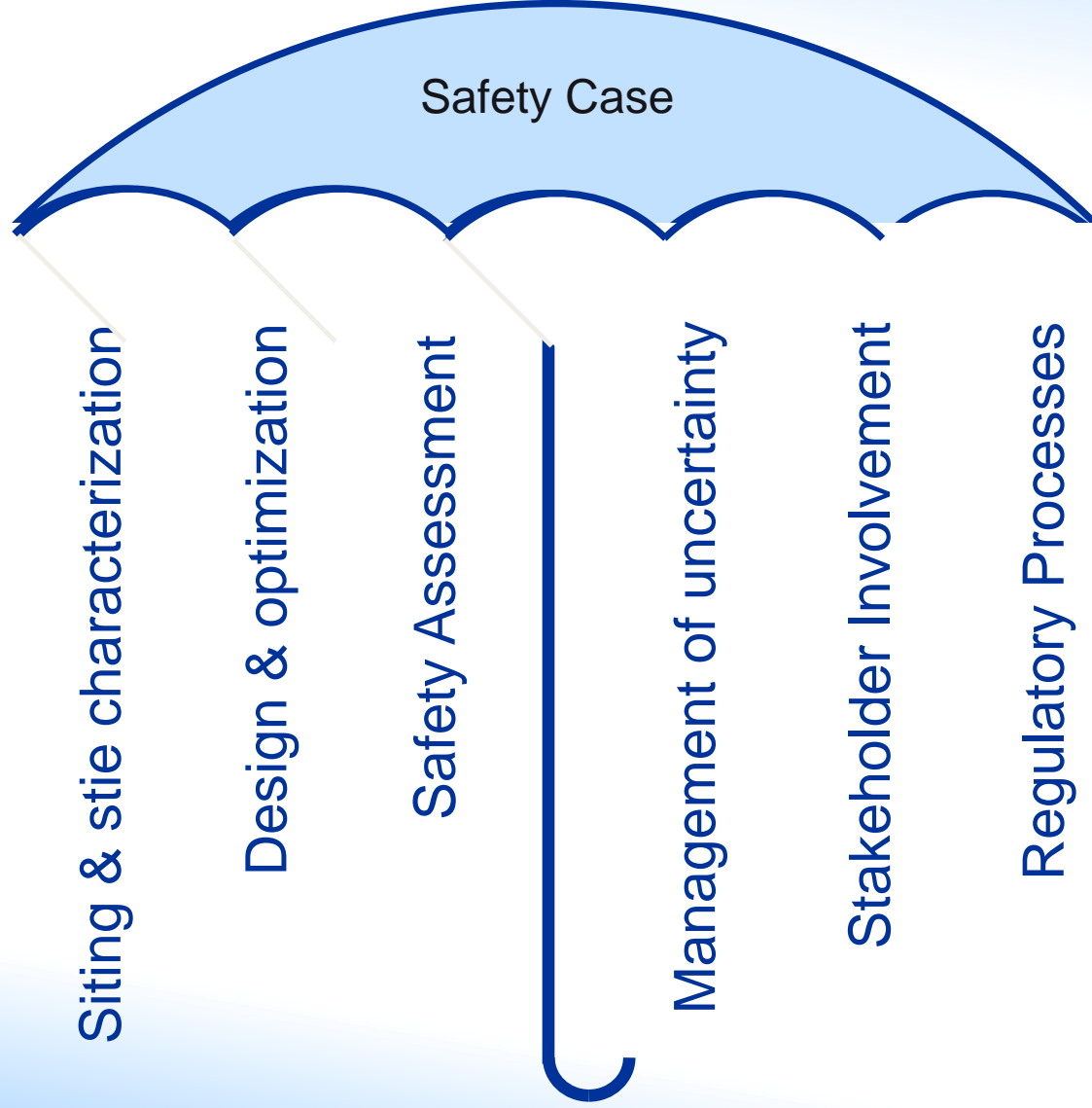
Projects on application of safety Standards



Other on-going projects

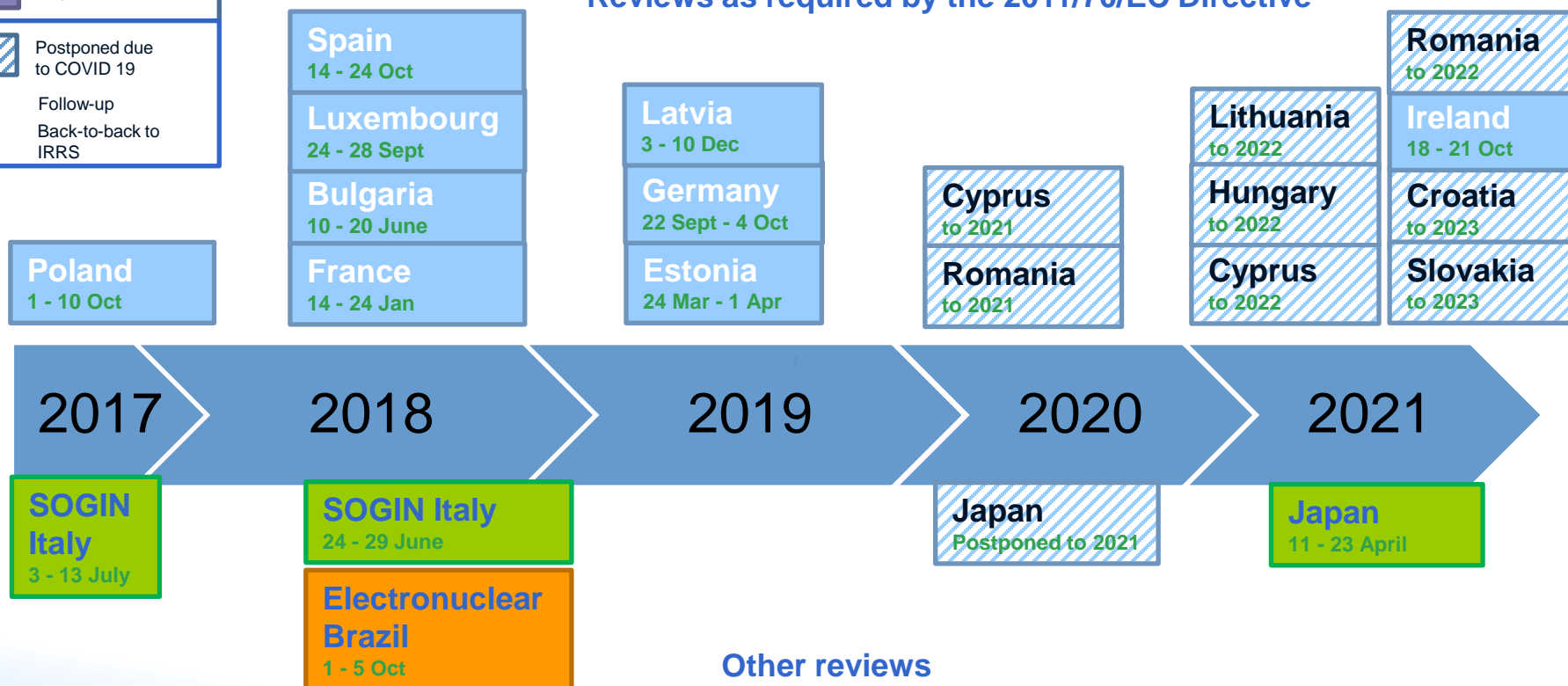
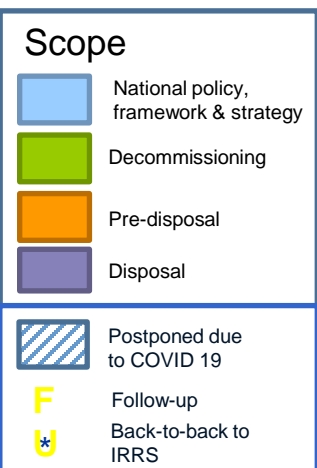
- Derivation of Specific Clearance Levels for Materials Suitable for Recycling, Reuse or Disposal in Landfills
- Development of training material on the safety of radioactive waste management
- Borehole disposal and end-of-life management of DSRS
- Centre of Excellence/Hub” on the Safety Case and Safety Assessment for the Management of Radioactive Waste and Spent Fuel

Way Forward



ARTEMIS Review Missions

Reviews as required by the 2011/70/EC Directive










Other reviews

ARTEMIS Review Missions

Reviews as required by the 2011/70/EC Directive

Scope

-  National policy, framework & strategy
-  Decommissioning
-  Pre-disposal
-  Disposal
-  Postponed due to COVID 19
-  Follow-up
-  Back-to-back to IRRS





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Introduction to the Joint Convention and its Review Process

JC ON THE SAFETY OF SF MANAGEMENT AND ON THE SAFETY OF RWM



- A **legally binding** agreement between Contracting Parties
- The **first** and only international **binding legislation** in the area of safety of spent fuel and radioactive waste management
- Based on the **IAEA Safety Fundamentals** for RWM
- An “**Incentive**” convention
- A “sister” convention of the Nuclear Safety Convention
- **88** Contracting **P**arties as of 2022



Background



Joint Convention on the Safety of Spent
Fuel Management and on the Safety of
Radioactive Waste Management

IAEA International Law Series No. 1



- Adopted in September 1997
- Entered into force in June 2001
- Sister convention to the Convention on Nuclear Safety

Roles

- The Joint Convention belongs to the Contracting Parties
 - Their representatives are key players in the Review Process and as Officers
- The International Atomic Energy Agency is:
 - The Depositary of the ratification and access instruments
 - The Secretary of the Joint Convention (including the maintenance of web pages and promotional activities)



Background



**The Joint Convention combines
two distinct subject matters**

Safety of spent fuel management



Safety of radioactive waste management



JOINT STRUCTURE



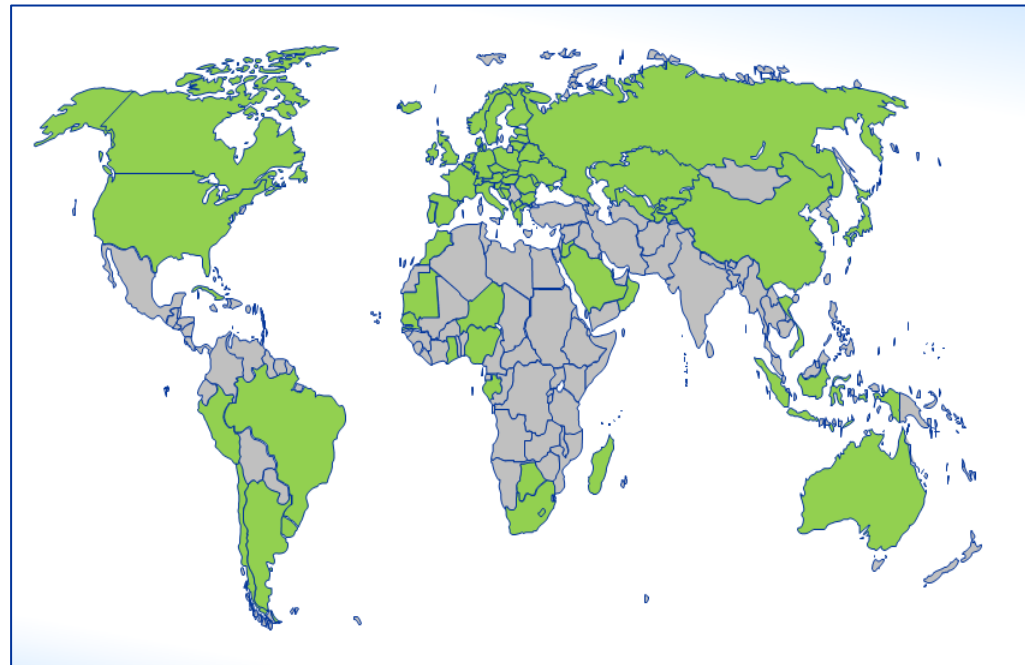
Objectives



- Achieve and maintain a high level of safety worldwide in spent fuel and radioactive waste management
- Ensure that, during all stages of spent fuel and radioactive waste management, there are effective defenses against potential hazards of such activities, now and in the future
- Prevent accidents with radiological consequences and mitigate their consequences should they occur

Current Status of the Joint Convention

- 88 Contracting Parties
- 7 Review Meetings held (every 3 years – 2003, 2006, 2009, 2012, 2015, 2018 and 2022)
- 7th Review Meeting in June-July 2022
- 4 Extraordinary Meetings held (2005, 2014, 2017 and 2022)





Scope of Application



- Spent fuel when the spent fuel results from the operation of civilian nuclear reactors
- Radioactive waste when the waste results from civilian applications, including decommissioning activities
- Uranium mining and milling wastes
- Discharges from regulated activities



Scope of Application



- Not spent fuel held at reprocessing facilities as part of a reprocessing activity
- Not radioactive waste containing only naturally occurring radioactive materials (NORM) and which is outside the nuclear fuel cycle
- Not spent fuel and radioactive waste from military or defense programmes



Scope of Application



Specific provisions on:

- transboundary movement
- disused sealed sources

Overlap with the Convention on Nuclear Safety regarding spent fuel and radioactive waste held at nuclear power plants

Structure of the JC

44 Articles altogether, divided into four groups

- technical
- political
- reporting
- Procedural

Into 7 Chapters

- Objectives, definitions and scope of application
- Safety of spent fuel management
- Safety of radioactive waste management
- General safety provisions
- Miscellaneous provisions
- Meetings of the contracting parties
- Final clauses and other provisions



Structure of the Joint Convention

Preamble	
Chapter 1 Objectives, Definition, and Scope of Application	Article 1–3
Chapter 2 Safety of Spent Fuel Management	Article 4–10
Chapter 3 Safety of Radioactive Waste Management	Article 11–17
Chapter 4 General Safety Provisions	Article 18–26
Chapter 5 Miscellaneous Provisions	Article 27–28
Chapter 6 Meetings of the Contracting Parties	Article 29–37
Chapter 7 Final Clauses and Other Provisions	Article 38–44



Substantive Provisions



General safety provisions (Articles 18 – 26)

Specific safety provisions (Articles 4 – 17):

- **Articles 4 – 10: Safety of Spent Fuel Management**
- **Articles 11 – 17: Safety of Radioactive Waste Management**

Miscellaneous provisions (Articles 27 and 28)

Who is the Joint Convention intended for?



- Its **scope is wide** – it covers all types of waste
- **All countries generate** some radioactive waste
- Therefore, unlike the Nuclear Safety Convention, the Joint Convention is relevant and potentially **useful to all States**

When should a country access the Joint Convention?



- As soon as possible
- A country should not wait until it has complied with all Articles of the Convention – it is an “incentive” convention
- Early involvement will allow Contracting Parties to move forward together
- “Strength in numbers” – a large global membership will facilitate worldwide movement towards improved Safety



Benefits of joining the Convention



	BENEFITS
Being a Contracting Party	<ul style="list-style-type: none">• Demonstrating country's political commitment to waste safety• Gaining public support
Preparation of a National Report	<ul style="list-style-type: none">• Self-assessment tool for analysis of the current status and opportunities for improvements
Participation in the Review Process	<ul style="list-style-type: none">• Exchange of information• Sharing of knowledge and experience
Identification of Good Practices and Challenges	<ul style="list-style-type: none">• Providing technical information on issues and capabilities of other CPs• Opportunity for identifying areas for technical assistance through the IAEA



Peer Review Mechanism



- Peer Review Mechanism in analogy to the Convention on Nuclear Safety
- Underlying Rules of Procedure and Guidance Documents



Peer Review Mechanism



- Contracting Parties prepare national reports (status quo – continuous self-assessment)
- Contracting Parties take part in the peer review process and ask and have to answer questions
- Contracting Parties have an opportunity to share knowledge and experience
- Identification of good practices and challenges

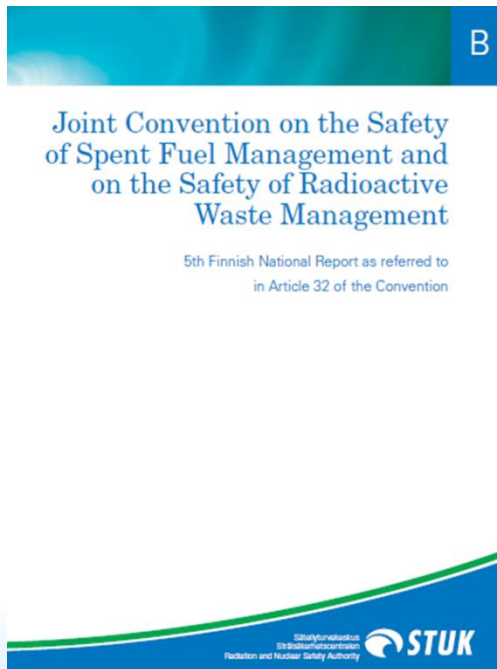


Peer Review Mechanism



Key Elements

National Reports



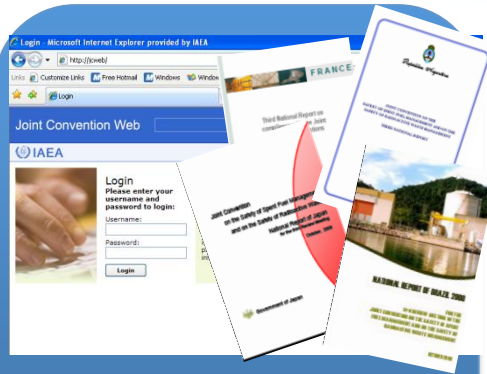
Q & A



Review Meetings



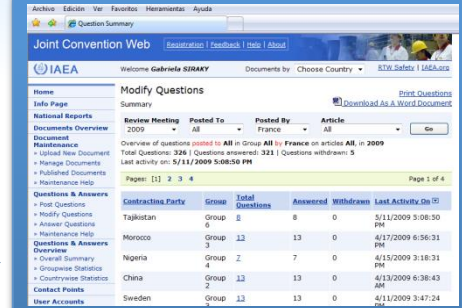
Review Process



Uploading
National Reports



Analysis of
National Reports



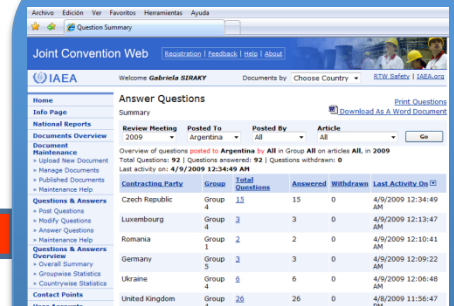
Preparation of
Questions



Preparation of
National Reports



Presentation of National Reports
at RM, discussion Q&A,
challenges, GP, improvements



Preparation of
Answers



More information

Joint Convention Website

<http://www-ns.iaea.org/conventions/waste-jointconvention.asp>

- Nuclear Safety & Security
 - Safety & Security Framework
 - Technical Areas
 - Services for Member States
 - Safety & Security Publications
- Conventions & Codes
 - Home page
 - Assistance in the case of a nuclear accident or radiological emergency
 - Convention on nuclear safety
 - Convention on physical protection of nuclear material
 - Early notification of a nuclear accident
 - Joint convention**
 - Codes of conduct
- Education & Training
- Meetings
- Special projects

Good 4 3 2 1 0 Poor

Rate this page

The Joint Convention

International Atomic Energy Agency
INFCIRC/546
24 December 1997
GENERAL DISC:
Original: ARABIC, CHINESE,
ENGLISH, FRENCH, RUSSIAN and
SPANISH

JOINT CONVENTION ON THE SAFETY OF SPENT FUEL MANAGEMENT
AND ON THE SAFETY OF RADIOACTIVE WASTE MANAGEMENT

Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management

Status and background

The Joint Convention entered into force on 18 June 2001. The current number of signatories and Contracting Parties is provided in the latest [status](#) document while detailed information about the origin and scope of the Joint Convention can be found under [background](#). Five [Review Meetings](#) were convened since the Joint Convention entered into force. Each Review Meeting produced a Summary Report. In addition numerous Contracting Parties made public their National Reports.

The Fifth Review Meeting of the Joint Convention was held in May 2015: [Summary Report: Arabic; Chinese; English; French; Russian; Spanish](#)

The Second Extraordinary Meeting of the Contracting Parties was held in May 2014: [Summary Report](#)

Joint Convention Documents

The [Articles of the Joint Convention \(INFCIRC/546\)](#), the [Rules of Procedure and Financial Rules \(INFCIRC/602/Rev.5\)](#), the [Guidelines regarding the Review Process \(INFCIRC/603/Rev.6\)](#) and the [Guidelines regarding the Form and Structure of National Reports \(INFCIRC/604/Rev.3\)](#) are provided in all UN languages.

Resources

- [Joint Convention Documents](#)
- [Results of Meetings](#)
- [JC Web Page](#)
- [Joint Convention Newsletter - Issue No. 4 - May, 2014](#)
- [Joint Convention Newsletter Archive](#)

Legal documents

- [Legal Agreement](#)
- [Latest Status of Signature and Ratification](#)
- [Declaration and Reservations](#)

Related links

- [Joint Technical Meeting, Paris, 2010](#)
- [Joint Convention Topical Meeting, Vienna, 2016](#)



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JOINT CONVENTION

27 June-8th July: 7th Review Meeting of the Contracting Parties

- OECD/NEA was invited to plenary sessions as an observer
- Journalists were invited to attend the opening plenary session and the part of the closing session where the Contracting Parties will adopt a Summary Report
 - ✓ sessions were streamed live
- 76 of the 88 Contracting Parties attended the Review Meeting
 - ✓ more than 750 registered delegates
- 10 new Contracting Parties since the 6th Review Meeting
 - ✓ Benin, Bolivia, Congo, Eritrea, Malawi, Paraguay, Rwanda, Syrian Arab Republic, Thailand, and Zimbabwe



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JOINT CONVENTION

7th Review Meeting of the Contracting Parties

- 84 of 88 CPs submitted a National Report
 - ✓ No National Reports submitted by Benin, Congo, Gabon and Rwanda
 - ✓ National Reports will be available on the [Joint Convention public website](#)
- A total of 4519 written questions / comments were submitted by 54 CPs on all of the national reports
 - ✓ 4281 responses were provided
 - ✓ 8 CPs did not respond to any written questions, and 2 CPs did not respond to all of the questions posed

Conferences



- International Conference on the Safety of Radioactive Waste Management, Decommissioning, and Environmental Protection and Remediation: Ensuring Safety and Enabling Sustainability, Vienna, Austria 6–10 November 2023
- International Conference on Nuclear Decommissioning: Addressing the Past and Ensuring the Future Vienna, Austria 15-19 May 2023



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Thank you!

