International Atomic Energy Agency

The Joint Convention Its Objectives, Burdens and Benefits

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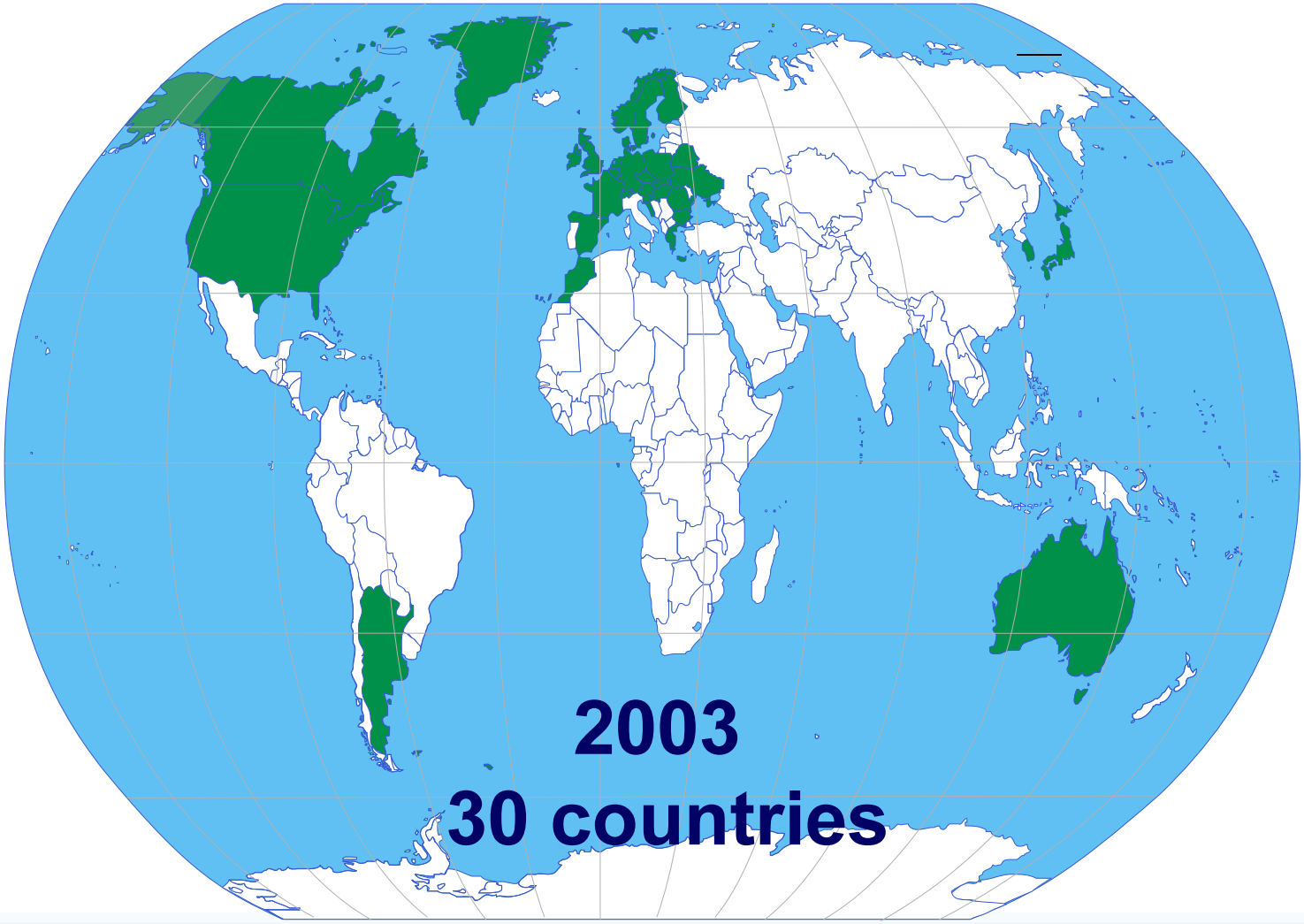
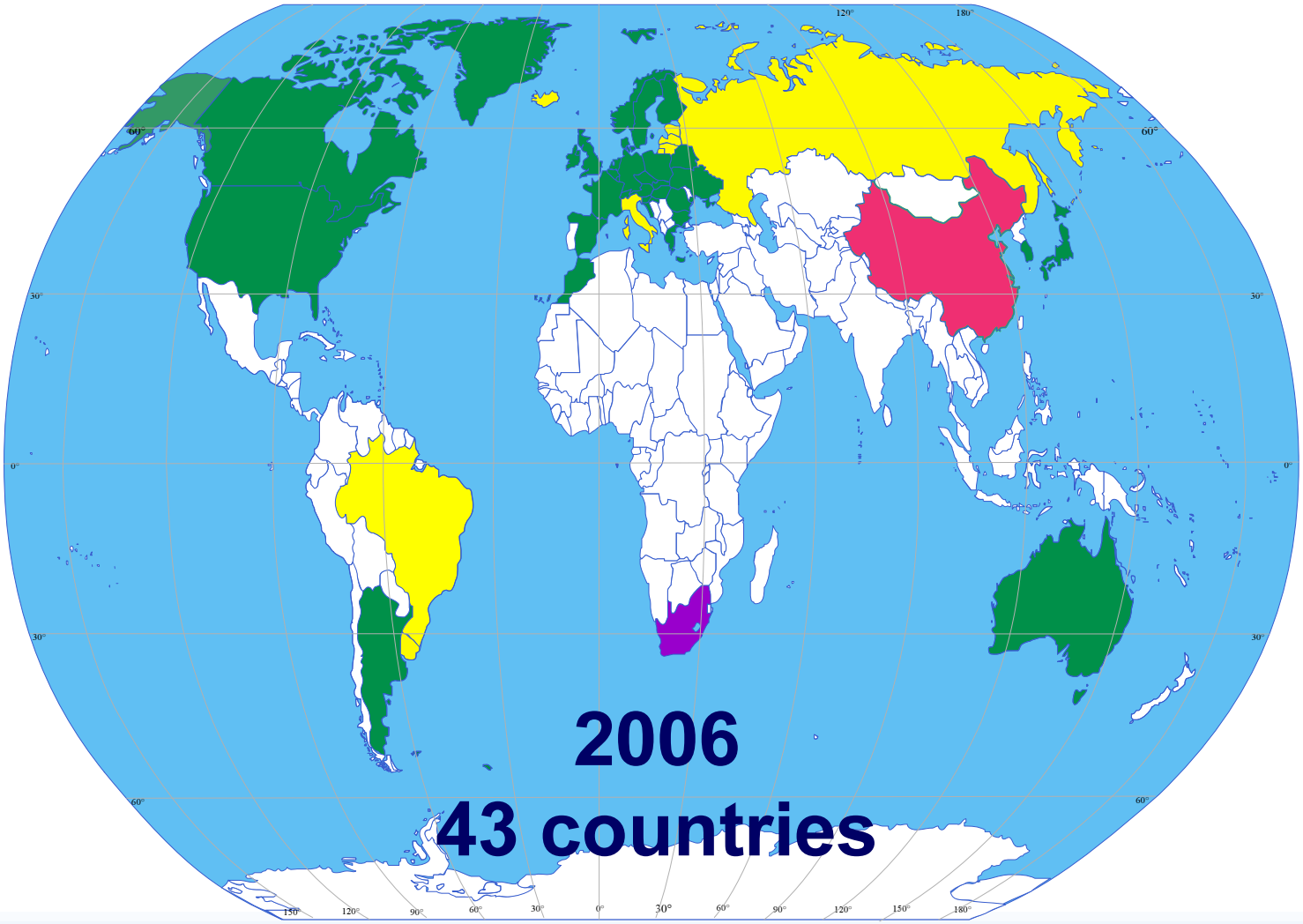
The Joint Convention

- The only legally binding international treaty in the area of radioactive waste management
- Its principal aim: “to achieve and maintain a high degree of safety worldwide in spent fuel and radioactive waste management”
- Entered into force 2001

Contracting Parties -1st Review Meeting



Contracting Parties - 2nd Review Meeting



Scope and Application

- Includes
  - Waste and spent fuel from the nuclear fuel cycle
  - Waste from use of radionuclides in medicine and industry
  - Spent sealed sources
  - Discharges from regulated nuclear facilities
  - Waste from mining and processing of uranium ore

Scope and Application

- **Does not include *(unless the Contracting Party declares it)***
  - **Spent fuel undergoing reprocessing**
  - **Waste containing naturally occurring radionuclides that does not originate from the nuclear fuel cycle**
  - **Spent fuel or radioactive waste within military or defence programmes**

Scope and Application

- The Joint Convention is relevant and potentially useful to <u>all States</u>
- The Joint Convention is the property of the Contracting Parties
- The IAEA
  - is the Depositary
  - and provides the Secretariat
- It contains 28 technical articles mainly based on the IAEA Safety Fundamentals on Radioactive Waste Management

Obligations of Contracting Parties

- **Contracting Parties are obliged to:**
  - **attend Review Meetings (every 3 years)**
  - **submit National Reports for review at the meetings**

http:www-rasanet.iaea.org/conventions/waste-jointconvention.htm

The Review Process (1)

- Contracting Parties must submit the National Report prior to the Review Meeting for review by all other Contracting Parties
- Prior to the Review Meeting, Contracting Parties submit questions on the National Reports of other Contracting Parties
- Answers are provided in advance of the Review Meeting

The Review Process (2)

- At the Review Meeting, Contracting Parties make oral presentations on the National Reports and engage in discussion of their reports (in Country Groups)
- Summaries of the discussions of the Country Groups are made to the Plenary Session
- This is followed by general discussion in the Plenary Session
- A Summary Report is agreed and made available publicly

First Review Meeting
November 2003
33 Contracting Parties

Technical issues (1)

- Clearance
  - Many felt the need for international consensus
- Decommissioning
  - Recognition of the need for integrated decommissioning and radioactive waste management plans and proper funding provisions
- Safety assessment
  - Some areas need further development e.g. long term storage and decommissioning

Technical issues (2)

- Approach to mixed waste
  - Further guidance needed
- Discharges to the environment
  - Insufficient attention given in National Reports
- Management of disused sealed sources
  - Not enough detail in National Reports
- International Safety Standards
  - Some particular areas identified where international standards are needed
  - Most supported their use as reference points for interpreting the Articles of the Convention.

Areas for safety improvement reported

- Regulations
- Disposal facilities and long term strategies
- Improved control over disused sealed sources
- Addressing legacy waste and site remediation
- Improvements to storage facilities
- Improvements to existing disposal facilities
- Various research and development programmes

Second Review Meeting

May 2006

41Contracting Parties

General Observations

- Progress made since 1st Review Meeting
- Commitment to improving policies and practices particularly in areas of:
  - National strategies for spent fuel and radioactive waste management
  - Engagement with stakeholders and the public
  - The control of disused sealed sources.

Challenges

- Implementation of national policies for the long-term management of spent fuel
- Disposal of high level wastes
- Management of historic wastes
- Recovery of orphan sources
- Knowledge management and human resources
- The need to ensure financial commitments are consistent with the extent of liabilities was also recognized

Areas of Progress

Legislative and Regulatory Framework

- **Important efforts to complete legislative and regulatory framework**

Spent Fuel and Waste Management

- **All Parties committed to address spent fuel and waste management comprehensively**
- **Some have made clear progress with the implementation of their strategic plans**
- **Increasing importance of public consultation and the need for public acceptance highlighted**

Spent Fuel and Waste Management

- **Many have defined funding strategies - some started collecting the funds only recently**
- **Some progress with siting of near-surface disposals, still a difficult issue to solve**
- **Geological disposal still more difficult to handle - some progress reported**
- **Regional disposal facilities mentioned by several Parties - it could be appropriate for some countries**
- **Exemption and waste clearance discussed – still not unanimity on the use of clearance levels**
- **Public acceptance and a clear radiation protection concept key issues for the success of using clearance levels**

Decommissioning

- **Many Parties with NPPs have established funding schemes for decommissioning**
- **Strategies vary from “immediate” (< 10 years after final shutdown) to delayed decommissioning following a long safe enclosure phase**
- **Keeping memory of the installation (modifications, incidents, etc.) recognized as crucial, especially in the case of delayed decommissioning**

Mining and Milling Tailings

- **Many with current or previous U mining activities reported on actions undertaken to put problematic sites in a safe condition**
- **Considerable progress reported**

Disused Sealed Sources

- Many registries established for sealed sources
- Most have enforced a return of disused sealed sources to the supplier
- Some have not yet defined a long-term policy
- Funding schemes for the recovery of orphan sources set up by many
- Disposal of disused sealed sources, especially long-lived - recognized as issue still to be solved
- The importance of implementing the IAEA Code of Conduct on the Safety and Security of Radioactive Sources was noted

Naturally Occurring Radioactive Materials (NORM)

- **Some decided to include NORM or TENORM**

Past Practices

- **Increased reporting on remediation activities**
- **Several included management of historic spent fuel and waste in their strategic plans**

International Cooperation

- **Many see benefit of enhancing international cooperation**
- **Need for sharing knowledge and assistance emphasized by those with limited radioactive waste management and research programmes**

Burdens of the Joint Convention

- Compilation of National Report
- Attendance of Organisational Meetings
- Review other National Reports
- Attend Review Meetings
- Provide officers to the Review Meetings

Benefits

- Self assessment
- Peer review
- International exchange
- Knowledge transfer
- Harmonisation
- Stakeholder confidence development

Third Review Meeting
May 2009