



IAEA

International Atomic Energy Agency
Atoms for Peace and Development

Status and Trends Project

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Status and Trends Project



- The project is intended to provide, at regular intervals, a report providing a condensed international overview, based on national input information, on:
 - spent fuel inventories (regardless of whether it is declared to be waste or not);
 - radioactive waste inventories (i.e. any material which is considered as radioactive waste in national waste management systems); and
 - national, regional and global status and trends on spent fuel and radioactive waste management.

Status and Trends Project



- Support the development of an integrated reporting tool, which responds to various requests for reporting at international level.
 - Identify and support how the reporting requirements could be simplified and made more effective and ensure that the information provided for different purposes is based on one common set of inventory data and associated information.

- In collaboration with the Member States, European Commission, the OECD Nuclear Energy Agency and other international organizations
- The project was launched in June 2014
- publishing regular updates (3-year cycle, corresponding to the reporting cycle of the Joint Convention).

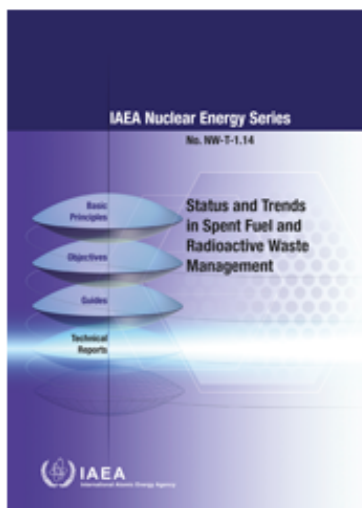
First cycle

- completed in June 2016.
- information provided corresponds to the end of December 2013
- Estimated 250 000 t HM of spent fuel in storage and 120 000 t HM of reprocessed spent fuel.
- approximately 35 million m³ of solid radioactive waste is, of which 28.5 million m³ (82% of the total) has been disposed of permanently and a further 6.3 million m³ (18%) are in storage awaiting final disposal.

47 National Profiles:

- Albania
- Argentina
- Armenia
- Australia
- Azerbaijan
- Belgium
- Bosnia and Herzegovina
- Bulgaria
- Canada
- China
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Georgia
- Germany
- Hungary
- Indonesia
- Iran, Islamic Republic of
- Ireland
- Italy
- Japan
- Republic of Korea
- Latvia
- Lithuania
- Luxembourg
- Malaysia
- Mexico
- Morocco
- Poland
- Portugal
- Republic of Moldova
- Romania
- Russian Federation
- Slovakia
- Slovenia
- South Africa
- Spain
- Sweden
- Turkey
- United Kingdom
- Ukraine
- United States of America
- Viet Nam

Report of the first cycle:



Status and Trends in Spent Fuel and Radioactive Waste Management

IAEA Nuclear Energy Series No. NW-T-1.14

Subject Classification: 0800-Nuclear fuel cycle and waste management

English STI/PUB/1799; (ISBN:978-92-0-108417-0); 57 pp.; 25 figures; € 39.00; Date Published: 2018

Contents:



- Introduction
- International legal instruments and IAEA Safety Standards
- Sources of Spent Fuel and Radioactive Waste
- Frameworks for the Management of Spent Fuel and Radioactive Waste
- Spent Fuel and Radioactive Waste Management Programmes: Current Practices and Technologies
- Inventories
- Future Forecasts
- Trends and Challenges
- Conclusions

Feedback:

- Your feedback on the first report is very welcome!
 - usefulness of the report
 - how it can be improved
- If possible – by May 2018
- Contact: M.Lust@iaea.org

Second cycle:



- Started in 2017
- Note Verbal went out 30th of November 2017



Atoms for Peace

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The Secretariat of the International Atomic Energy Agency (IAEA) presents its compliments to the IAEA's Member States and has the honour to draw their attention to the information below concerning the ongoing **Status and Trends Project on Spent Fuel and Radioactive Waste (S&T Project)**, which is being implemented by the IAEA in collaboration with the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development and the European Commission, and which aims to provide regular authoritative publications on global arrangements for the management of spent fuel and radioactive waste in line with the reporting cycle for the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (hereinafter referred to as the 'Joint Convention').

Inventory:

Table 1: Example of a translation matrix that can be used for transition from a national classification system to international classification GSG-1

National Waste Classification Name	VLLW	LLW	ILW	HLW
Class A	100%			
Class B		90%	10%	
Class C			80%	20%
Class D				100%

Table 2a: Solid Radioactive Waste in Storage

Waste Class	Total Current Volume (m ³) ¹	Estimated Disposal Volume (m ³) ²	Planned Disposal Route (if known) ³
Line for each class (as per national classes or international classification)	(m ³)		

Table 2b: Liquid Radioactive Waste in Storage

Waste Class	Total Current Volume (m ³)	Estimated Disposal Volume (m ³)	Planned Disposal Route (if known)
Line for each class (as per national classes or international classification)	(m ³)	(m ³)	

Table 3a: Solid Radioactive Waste Disposed (as disposed volume)

Waste Class	Volume (m ³)	Disposal Route Used ⁵
Line for each class (as per national classes or IAEA classification) ⁶	(m ³)	
...		

Table 3b: Liquid Radioactive Waste Disposed (as disposed volume)

Waste Class	Volume (m ³)	Disposal Route Used
Line for each class (as per national classes or IAEA classification)	(m ³)	
...	(m ³)	

Report of second cycle:

- Stand-alone document;
- There will be a separate chapter on new developments since the last report
- Some of the topics to be discussed:
 - Long term funding mechanism
 - Spent fuel management option choice
 - Progress towards disposal
 - Decommissioning and management of decommissioning waste
 - Uncertainty and inconsistencies in the data
- Split the chapter on trends and challenges into several chapters
- More focus on the trends.

Next Joint Working Group Meeting:



- 2-6 July 2018, European Commission, Luxembourg
- The main topics are:
 - Status report on the joint reporting tool
 - Feed-back on the first report and how to accommodate it
 - Information from JC review meeting
 - Discuss draft of second report
 - Collect information on recent developments
 - Collect information on challenges and achievements
 - Topical Workshops



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Thank you!

