EURADWASTE'22

30 May - 3 June 2022
Lyon, France

IAEA Activities to transfer Information and Knowledge in Radioactive Waste Management

IAEA
International Atomic Energy Agency
Atoms for Peace and Development

Opportunity for Synergies with EURAD and PREDIS

IAEA – The world's center for cooperation in nuclear

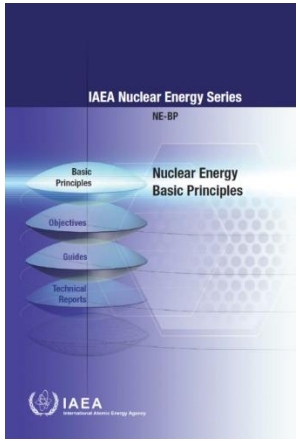
Established in 1957

174 Member States

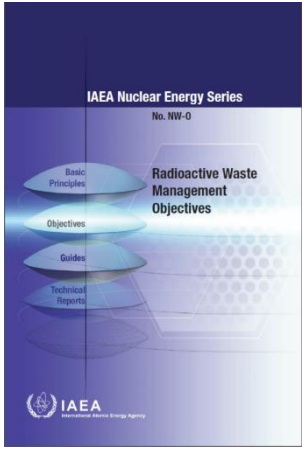
Tools to capture and transfer Information and Knowledge

Capturing Information & Knowledge – Publications remain central

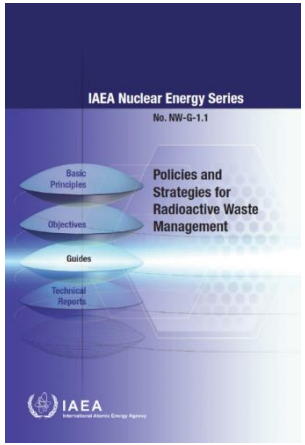
Principles



Objectives



Guides



Technical Reports

1. Basis to understand RW
2. Options for waste processing
3. Implementing disposal programmes

The aim is to provide the basis for integrated planning - evolving the focus from localized considerations, to addressing the overall national responsibilities in an effective manner.

Opportunity for synergies with EURAD and PREDIS

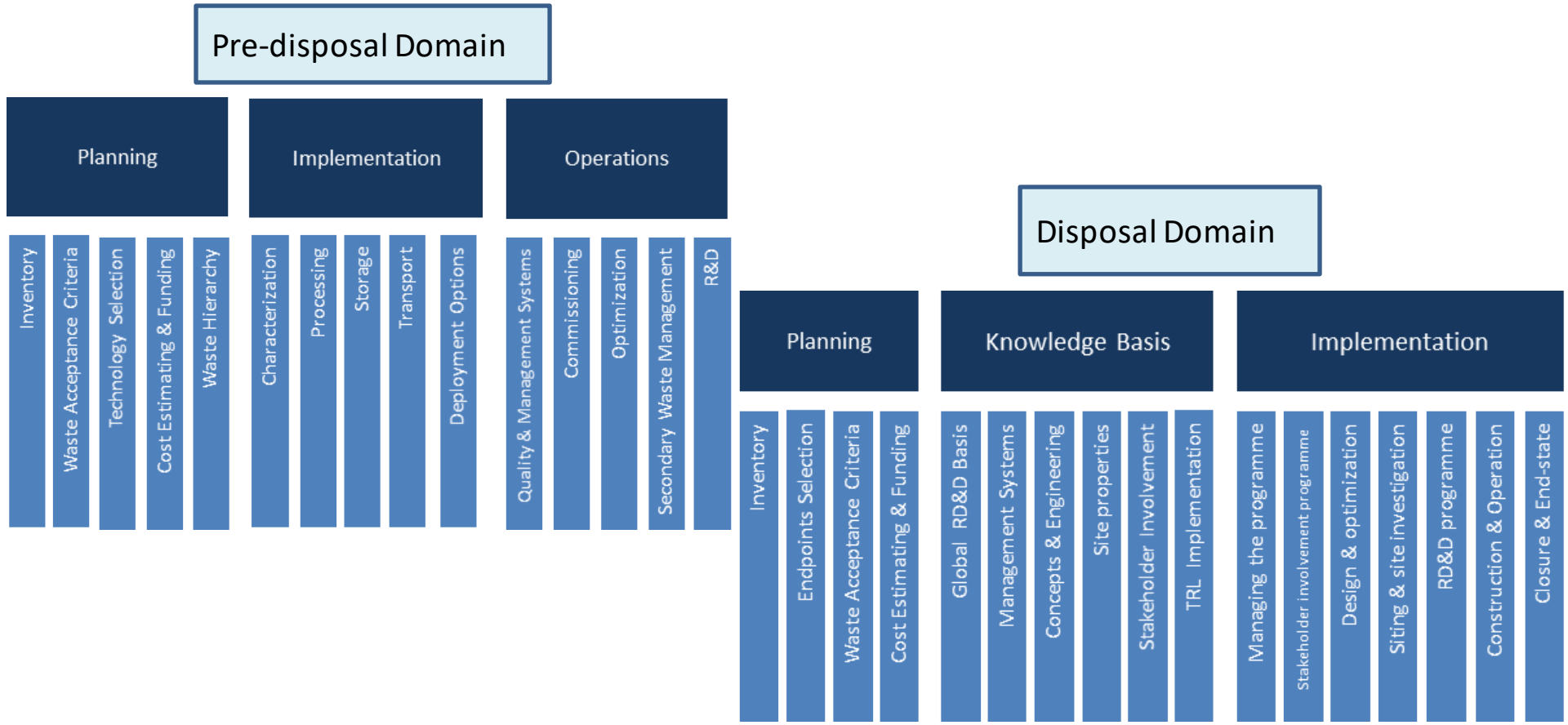
➢ Continuous engagement since inception of EURAD and PREDIS

- ✓ Mutual awareness and understanding
- ✓ Develop similar structures for I&K
- ✓ Inform when scope and objectives align

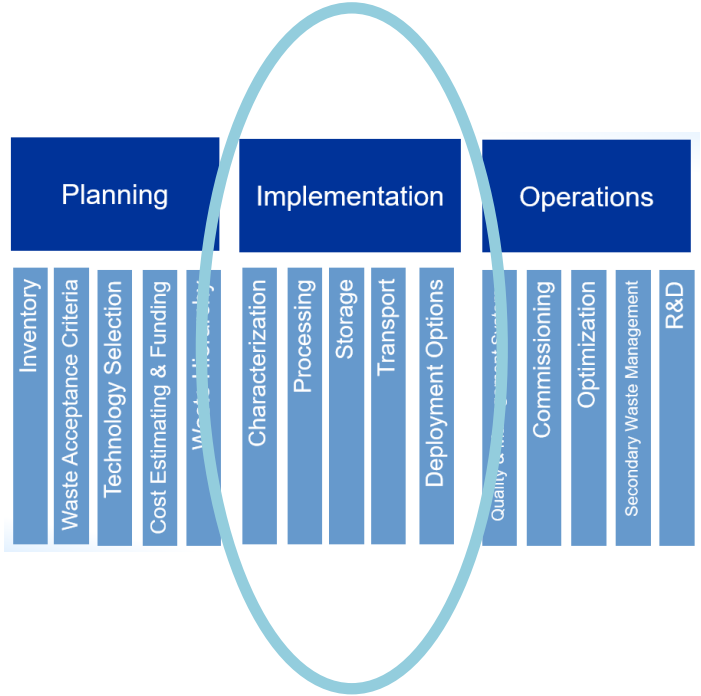
➢ Identify opportunities – Examples

- Establish guidance / status review
- Long term I&K preservation
- Structure and preserve case studies, R&D…
- Training

Structuring I&K – Pre-Disposal & Disposal Domains



Capturing I&K – Example: Technology Optioneering Predisposal



Further examples of thematic Predisposal I&K

2022

IAEA-TECDOC-xxxx

International Project on Irradiated Graphite Processing Approaches (GRAPA)

IAEA

In publication

IAEA-TECDOC-xxxx

Decontamination Methodologies & Approaches

IAEA

In publication

IAEA-TECDOC-xxxx

Processing & storage of high activity solid waste from reactor cores and structures

IAEA

In publication

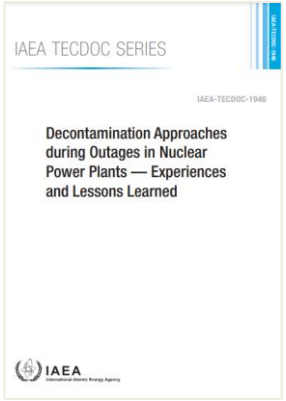
IAEA-TECDOC-xxxx

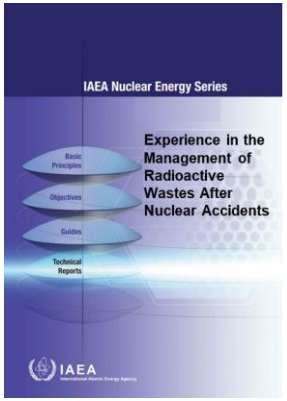
Techniques And Technologies For The Reduction Of Radioactive Liquid And Gaseous Discharges From Nuclear Power Reactors

IAEA

In publication

Published or available as prepublication drafts on the web

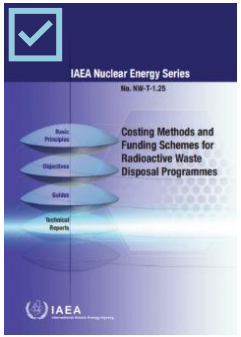


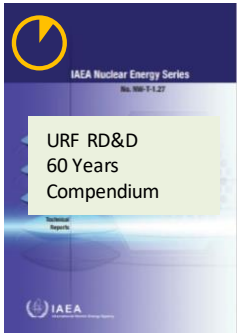


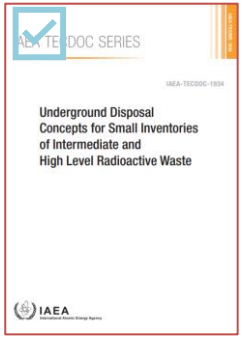
Capturing and Transferring I&K – Predisposal – In Progress

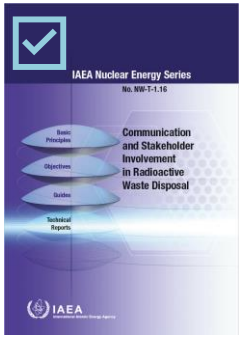
- NE Series: International Safeguards in the Design of Facilities for Radioactive Waste Management
- NE Series: Optimization of waste arising from NPP operations
- TECDOC: Approaches for the Management of Bituminized Radioactive Waste
- Management of hazardous waste coming from reactor operations & decommissioning
- ICTP thematic schools – 2022 Radionuclide Migration
- Predisposal nuclear wiki article development – technologies and fundamentals
- CRPs: Pu- containing liquid organic waste; INWARD

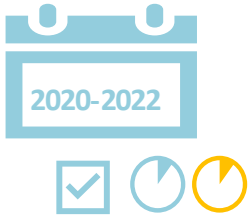
Capturing I&K – Example: Knowledge Basis and Implementation Disposal











Planning

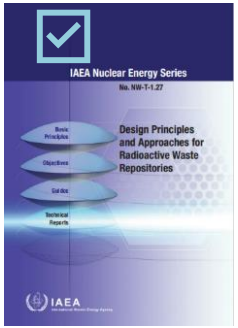
- Inventory
- Endpoints Selection
- Waste Acceptance Criteria
- Cost Estimating & Funding

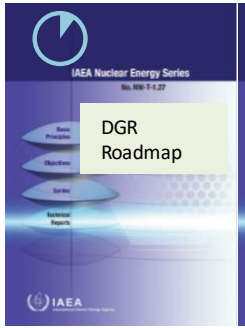
Knowledge Basis

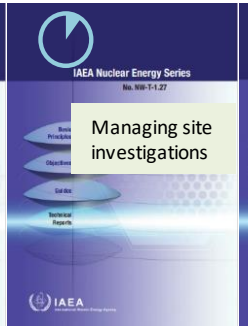
- Global RD&D Basis
- Management Systems
- Concepts & Engineering
- Site properties
- Stakeholder Involvement
- TRL Implementation

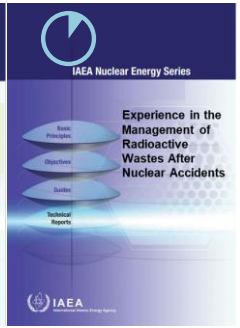
Implementation

- Managing the programme
- Stakeholder involvement
- Design & optimization
- Siting & site investigation
- RD&D programme
- Construction & Operation
- Closure & End-state









Capturing and Transferring I&K – Disposal – In Progress

- Disposal options for graphite bearing waste
- Hearing local stakeholders' experiences and expectations
- Closure and monitoring for institutional control of near-surface disposal*
- Construction of URF and DGR access infrastructure*
- Training courses on DGR Roadmap; on Design for disposal; on Stakeholder involvement with disposal
- Disposal Nuclear wiki article development

* Recently launched

Capturing I&K – E-learning, Webinars, NuclearWiki, INIS, Databases

Learning Support

Course Catalogue

e-learning (CLP4NET LMS)

Mediasite Streaming Platform

Webinars

Collaboration

IAEA Networks (CONNECT)

bDN CBH CGULS DISP ENV IDN IPN LAB MSN NKM NNE RSLS SFM URF

IAEA Nuclear Wiki

Public

EXPERTS Only

Technical Articles

Case Studies & Technical Articles

Preservation

Computer Aided Indexing

INIS

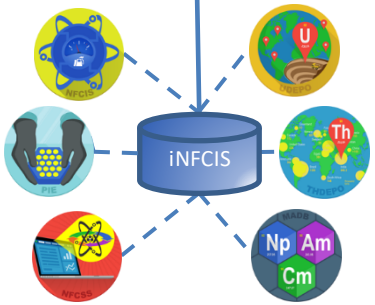
Knowledge Organization Systems

PoolParty Taxonomy Manager

Information

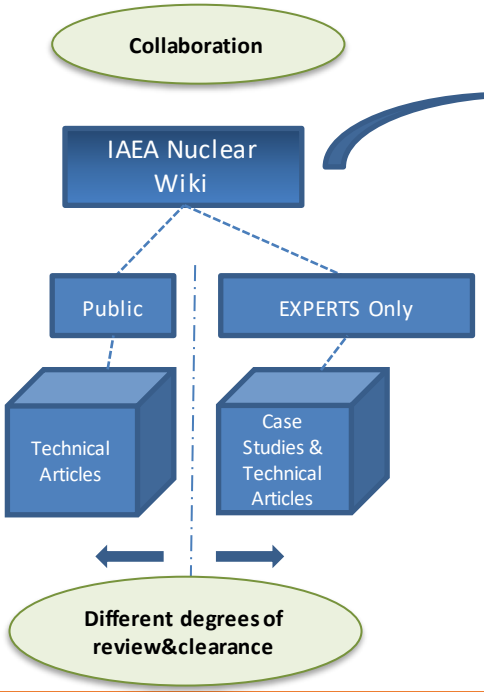
NE Databases

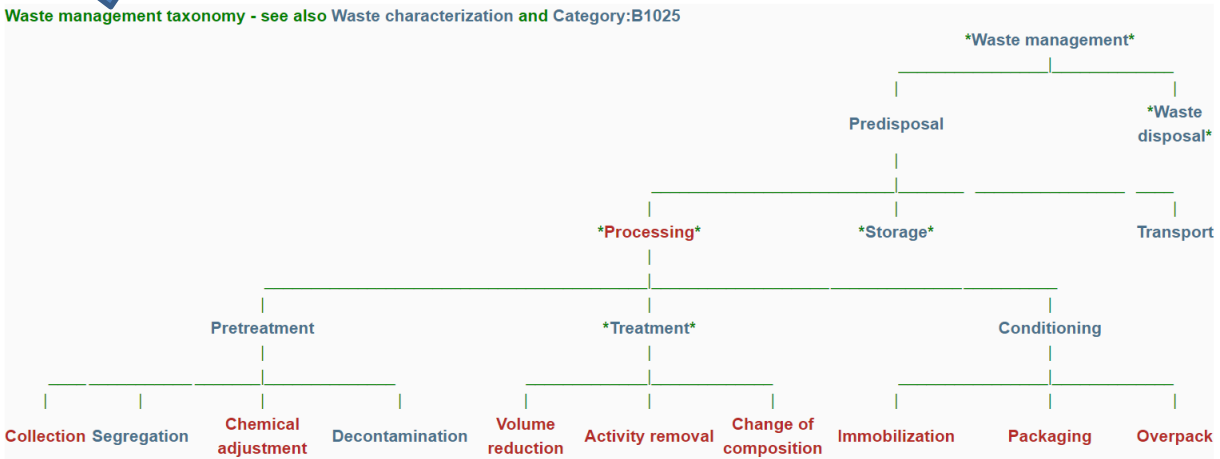
ARIS ICRSS PRIS RRDB SRIS



Capturing I&K – IAEA Nuclear Wiki

- ✓ Easy to use, accessible, semantic K platform
- ✓ Promote exchange of Scientific/Technical information
- ✓ Enables creation, review, sharing of K

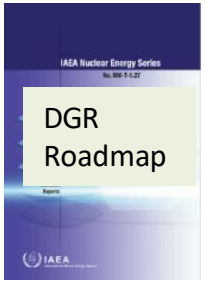


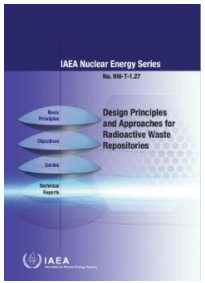


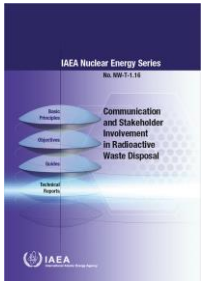
Transferring I&K – The IAEA Technical Cooperation Programme

- ✓ A major pillar of IAEA transfer of knowledge in RWM is based on Capacity Building through the Technical Cooperation Projects.
- ✓ Supported by a suite of training courses (In development)

Transferring I&K - Training Courses





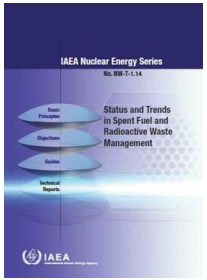


Basis for course content

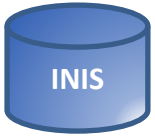
- ✓ Learning Objectives
- ✓ Agenda – Lectures - Exercises
- ✓ Mix of IAEA general guidance (fixed/reference) and National case studies (adjustable to lecturers' expertise)

Opportunity for synergies with EURAD and PREDIS

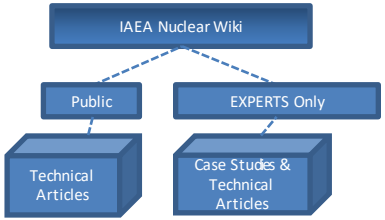
✓ Joint development of higher-level guidance or status review
(Example “Status&Trends”)



✓ Long term I&K preservation – International Nuclear Information System (INIS) | IAEA
(Example “Deliverables of NF-PRO”)



✓ Capturing focused I&K – IAEA Nuclear Wiki



✓ Proactive transfer of I&K – Mobility & Training

➢ Benefit from complementarities

Thank you!

[Home: International Conference on Radioactive Waste Management: Solutions for a Sustainable Future | IAEA]

Useful Links

- Wiki : https://idn-wiki.iaea.org/wiki/Main_Page
- Networks : https://nucleus.iaea.org/sites/connect/Pages/default.aspx

- eLearning: https://nucleus.iaea.org/sites/connect-members/LMS/Pages/Module-Mindmap.aspx

- INIS information repository: https://inis.iaea.org/search/