

IAEA Coordinated Research Project on Challenges, Gaps and Opportunities for Managing Spent Fuel from SMRs

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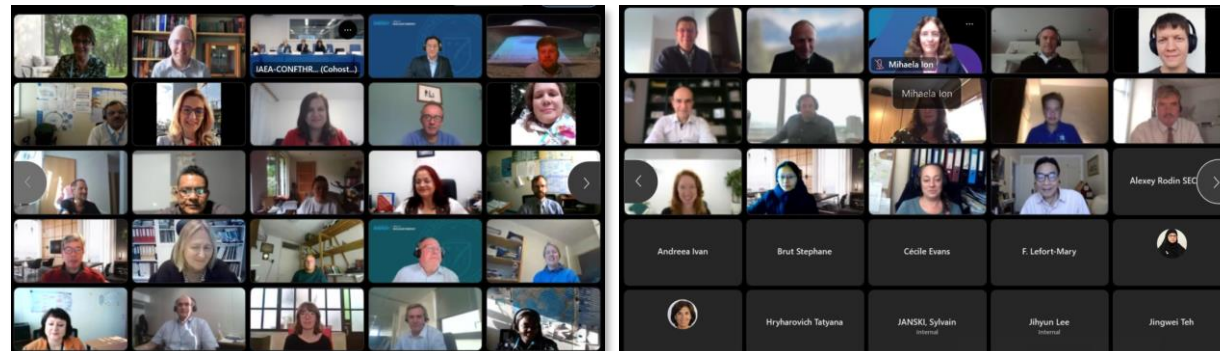


Technical Meeting on Backend of the Fuel Cycle Considerations for SMRs, 20-23 September 2022

107 Participating
Experts
from **32** Member
States &
3 International
Organizations



~ 40 Presentations
and Extended
Abstracts



IAEA TECDOC SERIES

IAEA-TECDOC-2040

IAEA-TECDOC-2040

Considerations for the
Back End of the Fuel Cycle
of Small Modular Reactors
Proceedings of a Technical Meeting

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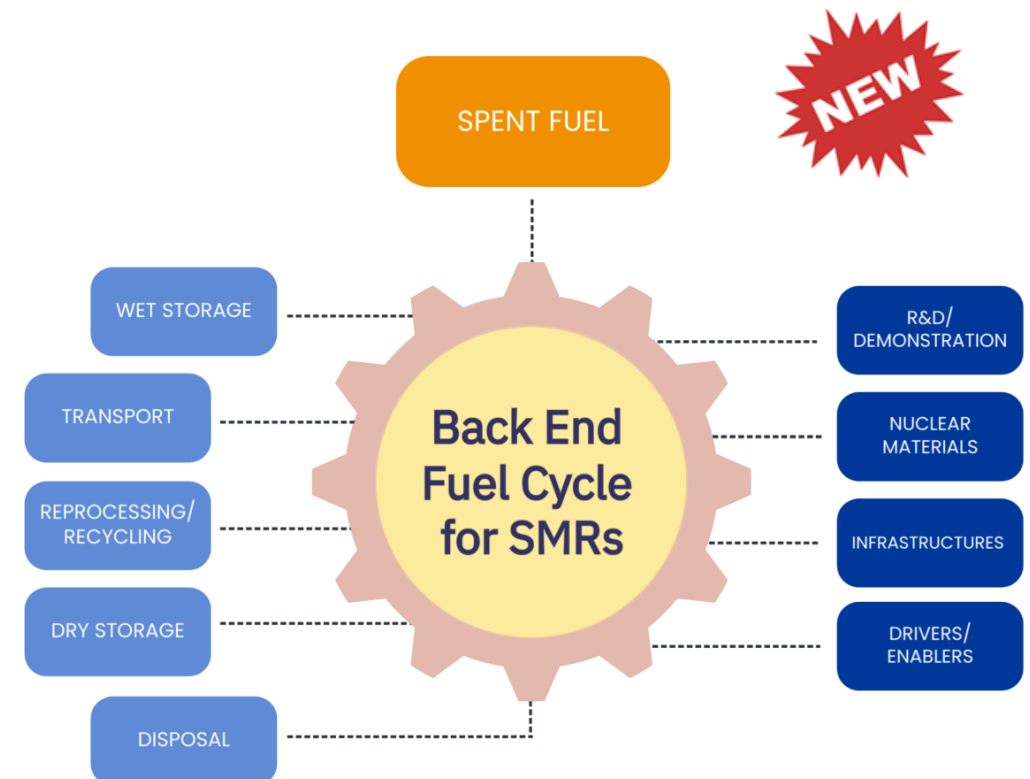
Understanding the implications of the management of new spent fuels is paramount to make informed decisions

MAIN OBJECTIVES:

- To identify viable nuclear fuel cycle options for the different SMR technologies
- To identify common technologies/similarities for various reactor types and/or significant differences
- To prepare a list of generic key parameters for countries to perform their analysis incorporating their specific context

<https://www.iaea.org/projects/crp/t13021>

SMR-COGS, CRP T13021





Coordinated Research Project on Challenges, Gaps and Opportunities for Managing Spent Fuel from SMRs

MAIN OUTPUTS

- Development of **specific roadmaps** for **managing spent fuel from the different SMR technologies**, identifying what can be derived, optimized or adapted from existing practices, or what needs to be fully developed
- To compare various SMR systems, in terms of efforts required to develop and implement an SFM strategy
 - Nuclear fuel cycle facilities
 - Technology readiness level
 - Nuclear materials involved
 - Infrastructures (e.g., human resources, financing)
 - R&D / Demonstrations
 - Enablers/Synergies



STATUS of the Coordinated Research Project SMR-COGS

- 14 Research Contracts from ARG, ARM, CPR, CZR, EGY, INS, LIT, MEX, POL, ROM(2), UKR(3)
 - 18 Research Agreements from CAN(2), CPR, DEN, EGY, JOR, NOR, SIN, SPA, SWE, TUR, UK(2), USA(5)
- from Industry, Operators, Researchers, Regulators, etc.

First Research Coordination Meeting held on 11 to 15 November 2024 in Vienna



First Research Coordination Meeting of SMR-COGS CRP held on 11 to 15 November 2024 in Vienna

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Nuclear Energy Programmes:

Embarking (Phase 1, 2 and 3), Expanding, Mature and Not Nuclear (DEN and NOR)

Observers: OECD/NEA, FIN, FRA, NET, RUS

45+ participants from 25 countries