DigiDECOM 2026 – NuclearNEXT Deep Dive Workshop

Preliminary Programme Overview and Presentations

Halden, Norway · 21–25 September 2026

Session schedule

Monday, 21 September 2026

09:00	15 min	**Welcome**
09:15	90 min	**Session 1. Opening keynotes on the current nuclear landscape**
10:45	30 min	Coffee break 1
11:15	90 min	**Session 1. Opening keynotes on the current nuclear landscape, continued**
12:45	60 min	Lunch
13:45	90 min	**Session 2. The Norwegian context**
15:15	30 min	Coffee break 2
15:45	30 min	**Sponsor session**
16:15	45 min	**End-of-day chaired discussion**
19:00		**Gala dinner**

Tuesday, 22 September 2026

09:00	30 min	**Sponsor session**
09:30	90 min	**Session 3. European and international R&D developments**
11:00	30 min	Coffee break 1
11:30	90 min	**Session 3. European and international R&D developments, continued**
13:00	60 min	Lunch
14:00	80 min	**Session 4. Multinational European Closed Fuel Cycle - Part 1**
15:20	15 min	Coffee break 2
15:35	45 min	**Session 4. Multinational European Closed Fuel Cycle - Part 2**
16:20	80 min	**Session 4. Commercial Maritime Nuclear**
17:30	45 min	**End-of-day chaired discussion**

Wednesday, 23 September 2026

09:00	90 min	**Session 5. Human–Technology–Organisation Perspectives for Nuclear Systems**
10:30	30 min	Coffee break 1
11:00	80 min	**Session 6. From innovation to market-ready solutions**
12:20	60 min	Lunch
13:20	85 min	**Session 6. Demonstration and discussion session: from prototype to deployable solution**
14:45	30 min	Coffee break 2
15:15	30 min	**Sponsor session**
15:45	60 min	**Session 7. Nordic and international collaboration**
16:45	45 min	**End-of-day chaired discussion**

Thursday, 24 September 2026

09:00	120 min	**Session 8. AI/LLM applications for nuclear data**
11:00	30 min	Coffee break 1
11:30	90 min	**Session 9. Political and societal aspects of renewed nuclear interest**
13:00	60 min	Lunch
14:00	60 min	**End-of-day chaired discussion**
15:00	15 min	**Closing remarks and feedback**

Friday, 25 September 2026

09:00	~180 min	**Optional laboratory visits in Halden** **Participants must bring valid ID or passport!**

Presentations and speakers

Session 1. Opening keynotes on the current nuclear landscape

Monday 21 September 2026, 09:15–10:45 and 11:15–12:45

Chair: Helena Mrazova (IAEA). Co-chairs: Fredrik Holm (Halden Municipality, NKK, NNA); Jan Porsmyr (IFE).

Presentation or programme item	Speaker and organisation
Welcome from IFE	
Welcome from HUN-REN Energy Research Center	
Welcome opening and introduction	István Szőke, IFE
Keynote 1	Fredrik Holm, Halden Municipality
Keynote 2	Helena Mrazova, IAEA
Keynote 3	Roger Garbil, European Commission
Keynote 4	Meritxell Martell, Merience / SHARE Platform
Keynote 5	Henry Preston, World Nuclear Association
General question-and-answer session and contingency	Session chairs

Session 2. The Norwegian context

Monday 21 September 2026, 13:45–15:15

Chair: Martin Hjelmeland (Norwegian Nuclear Association). Co-chairs: Tina Melfjord-Piontek (NKK); Fredrik Holm (Halden Municipality, NKK, NNA).

Presentation or programme item	Speaker and organisation
Presentation by DSA	Ingeborg Mork-Knutsen, Department Director, Radiation Protection and Environment Department, DSA
Presentation by Aker Solutions	Mats Deleryd, Senior Vice President, Aker Solutions
Presentation by AFRY	Ingeborg Grötterud, Head of Nuclear, AFRY
Presentation by AF Gruppen	Robert Haugen, Director of Business Development, AF Gruppen
Presentation by Thor Energy	Øystein Asphjell, Daglig Leder, Thor Energy
Presentation by EDF	EDF
Panel discussion on the Norwegian context	Session speakers and chairs; additional panellists may be invited.

Session 3. European and international R&D developments

Tuesday 22 September 2026, 09:30–11:00 and 11:30–13:00

Chair: Maugan Michel (CEA). Co-chairs: Seifallah Ben Hadj Hassine (European Commission, DG RTD); Abdenour Benkrid (IFE); Helena Mrazova (IAEA).

Presentation or programme item	Speaker and organisation
International R&D Initiatives and Emerging Technologies in Nuclear Decommissioning	Helena Mrazova, IAEA (NE/NEFW/D&ER)
Euratom Research and Training Programme: Pioneering Robotics and Digitalisation in the Nuclear Back-End	Seifallah Ben Hadj Hassine, European Commission, DG RTD
EURATOM project XS-ABILITY: First field results and road to demonstration of autonomous AI-driven unmanned robotic radiological surveying for nuclear D&D	Maugan Michel, CEA
Towards Autonomous Multi-Robot Fleets for Safe and Secure Nuclear Decommissioning	Abdenour Benkrid, IFE
Euratom project DORADO – applying digital twins and a dedicated ontology for robot-assisted decommissioning operations	Antti Räty, VTT
3D/BIM data platform enhanced by AI and LLM to support nuclear decommissioning planning	Dušan Daniška, WAI
Radiation source reconstruction and visualization using AV/VR technologies to support CNL's decommissioning mission	Lucian Ivan, CNL
End-User Driven Digital Twins for Geological Radioactive Waste Disposal: EURAD-2 DITOCO2030	Réka Szőke, HUN-REN EK-CER
Coordinated Heterogeneous UGV–UAS Systems for Nuclear and Radiological Emergency Response	Abdenour Benkrid, IFE

Session 4. Future nuclear systems and applications

Tuesday 22 September 2026, 14:00–17:30

Chair: Erlend Hagen (Traneberget AS). Co-chairs: Martin Hjelmeland (Norwegian Nuclear Association); Shahab Dabiran-Zohoory (OECD NEA); Dag Øistein Eriksen (UiO, NNA, Thorium Network).

Multinational European Closed Fuel Cycle

Presentation or programme item	Speaker and organisation
Opening: Closing the fuel Cycle is reemerging as a solution to our energy constraints	Erlend Hagen, Traneberget AS / Norwegian Nuclear Association
OECD Nuclear Energy Agency activities supporting fuel cycle closure	Shahab Dabiran-Zohoory, Nuclear Scientist, OECD NEA
Reprocessing and recycling spent nuclear fuel: 50+ years of industrial experience, future developments, and the path towards the closed fuel cycle	Xavier Domingo, Head of European Division and Strategic Marketing, Orano Recyclage
The French programme for closing the fuel cycle, and the role of fast neutron reactors	Sylvain Takenouti, Deputy Director, French Governmental Programme for Closing the Fuel Cycle
Spent nuclear fuel: a liability or an asset for today's and tomorrow's nuclear power plant owners?	Luc Van Den Durpel, CEO and Founding Partner, Nuclear-21
The legal and safeguards perspective on a multinational European closed fuel cycle	Bogdan Stefan, Head of Legal Sector, Euratom / DG ENER
Panel discussion: opportunities, challenges and international conditions for a multinational European closed fuel cycle	The speakers above, joined by Dawn Watson, Head of Strategy and Technical, Sellafield
Closing remarks	Erlend Hagen, Traneberget AS / Norwegian Nuclear Association

Commercial Maritime Nuclear

Presentation or programme item	Speaker and organisation
Opening: Nuclear Power can decarbonize commercial Shipping. Ongoing development, and how different reactors and their fuel fit in the larger picture	Erlend Hagen, Traneberget AS / Norwegian Nuclear Association
The NuProShip and the SFI Saint programs at NTNU Ålesund	Terje Strand, NuProShip / SFI Saint
The Emerald GEM High-Temperature Gas-Cooled Reactor (HTGR) and Energy Systems: Enabling Marine Nuclear - Electric Power & Propulsion to Decarbonize the Shipping Industry	Hallgeir Juliebø, Co-founder and CCO, Emerald Nuclear
Motivations and Considerations in Korean MSR R&Ds for Commercial Ship Propulsion	Professor Yonghee Kim, Department of Nuclear and Quantum Engineering, KAIST
The contribution of IFE in the NUPROSHIP and SFI Saint programs	Stine Strand, IFE
Panel discussion	Panellists to be agreed

Session 5. Human–Technology–Organisation Perspectives for Nuclear Systems

Wednesday 23 September 2026, 09:00–10:30

Chair: Stine Strand (IFE, Halden HTO). Co-chair: Andreas Bye (IFE, Halden HTO).

Presentation or programme item	Speaker and organisation
Welcome	Stine Strand and Andreas Bye, IFE
Putting the Human Back at the Centre of the Industrial Digital Landscape with a Smart Voice Assistant	André Joly / Masha Guermonprez, SPIX Industry
AI and 3D-Scanning for Nuclear Decommissioning	Anton Kress / Dr Stefan Hörmann, aurivus GmbH
International RegLab Project	Faiza Sefta, OECD NEA
The Halden HTO Project	Andreas Bye, IFE / Halden HTO

Session 6. From innovation to market-ready solutions

Wednesday 23 September 2026, 11:00–12:20 and 13:20–14:45

Chair: Kwangho Lee (KRID). Co-chairs: Kyungik An (Seabury Solutions); Iliana Ilieva (IFE); Bálint Batki (IFE).

Digital Planning and Decommissioning Execution

Presentation or programme item (ORAL+LIVE DEMO)	**Speaker and organisation**
AI-Based System for the German Regulator	GRS (Germany)
Development of a Scan-to-BIM W Clearance of Buildings (ORAL+LIVE DEMO)	Maarten Becker, iUS (Germany)
Semantic Backbone for the Decommissioning Lifecycle: Linking Dose Budget, Work Packages and Regulatory Evidence	Kyungik An, Seabury Solutions
Development of a Digital Twin Platform for Reactor Internals Segmentation and Decommissioning	Chung-gyu Lee, Deputy General Manager, Decommissioning and Decontamination Team, KEPCO KPS

Robotics, Training and Applied Digital Solutions

Presentation or programme item (ORAL+LIVE DEMO)	**Speaker and organisation**
Remote radiological surveys through the use of robotics	Matteo Saglia, Flyability
Deployment of Ground-Based Vehicles in Combination with Drones	Contribution from Ukraine
Digital Twin and XR-Based Training System for Decommissioning and Decontamination of Radioactively Contaminated Facilities	NOVATEK
DiWiDeRe – Digital Twin of a Deep Geological Repository for Nuclear Waste	Ing. Jan Kočí, CXI, Technical University of Liberec
Discussion	Session chairs

Session 7. Nordic and international collaboration

Wednesday 23 September 2026, 15:45–16:45

Chair: Margit Fábián (HUN-REN CER, Hungarian Nuclear Society). Co-chairs: Sven Sers (GIFEN, Capgemini); Camil Ghajary (CNA); Victoria Taubner (Nuclear Sweden); Harri Varjonen (FinNuclear).

Presentation or programme item	**Speaker and organisation**
Collaboration Inside-Out and Outside-In: A European and Nordic Perspective	Thomas Wiese, ENS / Framatome / NA²
Knowledge Management within the EURAD-2 Programme	Christophe Debayle, ASNR
Historical Nordic Nuclear Lessons and a Path Forward	Martin Hjelmeland, Country Manager Norway, Nordic Nuclear Energy AB

Session 8. AI/LLM applications for nuclear data

Thursday 24 September 2026, 09:30–11:00

Chair: Faiza Sefta (OECD NEA). Co-chairs: Terje Tverberg (IFE); Andreas Bye (IFE, Halden HTO).

Presentation or programme item	**Speaker and organisation**
NEA Joint Project "AIxpertise"	Shahab Dabiran-Zohoory, OECD NEA
From Halden Records to BISON: Traceable Nuclear Data Extraction with a Deterministic-First MCP Architecture	Bradlee Hope Jensen and Daniel J. Vanwasshenova, Idaho National Laboratory
The Joint Project "HAiLDEN"	Christian Hartmann / Terje Tverberg, IFE
AERIS Fuel Agent: An agentic workflow approach to analysing nuclear fuel data	Denise Adorno Lopes, ORNL
VTT's activities with AI/ML/LLM especially focusing on possibilities with the Halden data utilization.	Janne Heikinheimo, VTT

Session 9. Political and societal aspects of renewed nuclear interest

Thursday 24 September 2026, 11:30–13:00

Chair: Berta Picamal (nucleareurope). Co-chairs: Fredrik Holm (Halden Municipality, NKK, NNA); Meritxell Martell (Merience).

Presentation or programme item	**Speaker and organisation**

Presentation or programme item	Speaker and organisation
Political and societal aspects of new nuclear in Europe	Berta Picamal (nucleareurope)
Municipalities as leaders to study new nuclear	Fredrik Holm, Halden Municipality
Who answers for it - when the institution is gone?	Denys Nazarenko, Advisor at Kyiv City Council
Learning from Nuclear Legacies: REMPOR, Land Reuse and Data-Driven Decision Making	Sandra Faught (IAEA)
Panel discussion It will be focused specifically on the political and societal dimensions of the renewed interest in nuclear energy. We explore what lessons from past nuclear legacies and remediation efforts can offer regarding community expectations and public perception, long-term responsibilities, public trust, land reuse, and socio-economic outcomes, and how these lessons should shape political and societal decision-making around new nuclear developments.	

Sponsor sessions

Presentation or programme item	Speaker and organisation
Company pitch; representative and title to be agreed - **Wednesday 23 September**	INGECID
Short, flexible sponsor contribution	Fredrik Holm, Halden Municipality
Short introduction to the VRdose NOVA tool and project	István Szőke, IFE - VRdose NOVA project
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