DigiDECOM NuclearNEXT 2026: AI, data and robotics innovation for practical nuclear applications

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Since its launch in 2017, DigiDECOM has brought together researchers, industry representatives and other professionals interested in digital innovation in the nuclear sector. Its tenth edition, DigiDECOM NuclearNEXT 2026, took place in Halden, Norway, on 21–25 September 2026, hosted by the Institute for Energy Technology (IFE). DigiDECOM expanded its scope in 2025 with the introduction of NuclearNEXT, bringing wider developments in nuclear research, industry and future applications into discussions alongside its established focus on artificial intelligence (AI), data and robotics. The 2026 event also continued DigiDECOM's collaboration with the International Atomic Energy Agency (IAEA), the OECD Nuclear Energy Agency (NEA), the European Commission and a growing network of Nordic and international partners.

The event brought together 137 participants from 20 countries. Across nine topical sessions, discussions ranged from Norway's nuclear landscape and readiness to international research and future nuclear systems, including fuel-cycle and maritime applications. Other topics included the development of digital innovations into practical solutions, human, technological and organisational aspects of nuclear work, international cooperation, AI applications for nuclear data, and the political and societal questions surrounding renewed interest in nuclear energy.



Figure 1 A group of participants at DigiDECOM NuclearNEXT 2026 in Halden, Norway.

This article brings together a selection of the main developments, challenges and perspectives presented at DigiDECOM NuclearNEXT 2026. It aims to provide an overview for those who could not attend, while giving participants an opportunity to revisit some of the topics and discussions from the event.

HADRON (Hazard Aware Digitalisation and Robotics in Nuclear and other domains) is a developing concept advocated through DigiDECOM that brings together digital technologies,

information and organisational perspectives to support nuclear activities. Among its proposed capabilities is the integration of information collected by mobile robots equipped with sensors with other facility data, three-dimensional models and simulations. In the proposed modular architecture, an ontology would provide shared definitions and relationships so that systems can interpret the same facility objects, locations, measurements and tasks. This would allow tools from different organisations to work together, while individual components could be changed or extended.

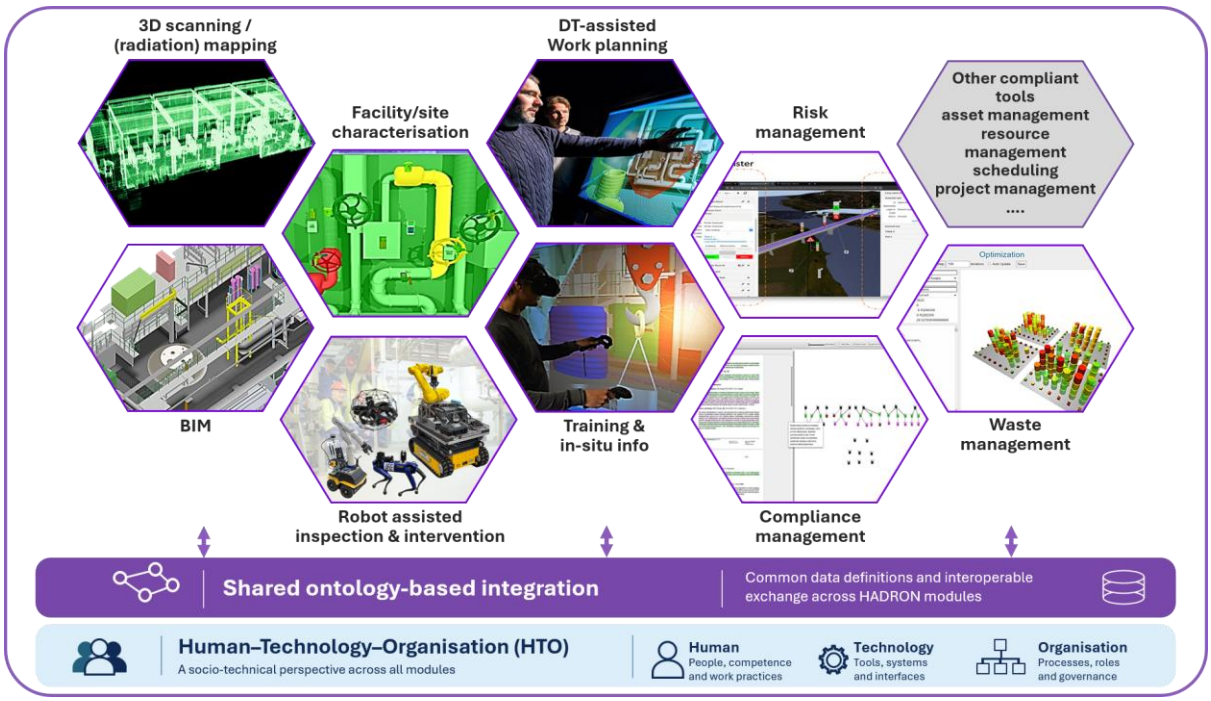


Figure 2 The HADRON concept: Modular digital technologies and tools connected through a shared ontology-based data environment, with Human–Technology–Organisation (HTO) considerations applying across the integrated system.

The concept also takes a Human–Technology–Organisation (HTO) perspective. This means considering how people interact with digital systems, how work and responsibilities are organised, and how organisations provide competence and assurance. Developing these arrangements alongside the technology is intended to support safety, operational efficiency and long-term sustainability.

The article combines substantial human input and drafting with analysis and text development assisted by large language models (LLMs). The article presents the authors' synthesis of the event, not a statement of conclusions formally agreed by participants.

From prototypes to practical nuclear applications

One of the practical questions explored at DigiDECOM NuclearNEXT 2026 was what it takes to turn successful digital prototypes into solutions that can be used routinely in nuclear work. Making the core technology work is only part of the challenge. Robotic systems, digital twins (digital models linked to information about physical assets or processes) and AI tools must also be suited to the intended tasks and to the people and organisations responsible for qualifying, operating and maintaining them.

A prototype can show that a calculation, sensor connection or robot movement works under selected conditions. However, acceptance for a nuclear task requires further evidence that the underlying data, models and assumptions are appropriate for the intended application, and that people can operate the tool, assess its results and respond when it does not work as expected. Developers and users then need to establish how the solution can be deployed and supported beyond its original demonstration, without continued dependence on the development team.

For a facility application, routine use involves preparing and importing site information, fitting the tool to existing processes and arranging access and permits for the work. Users need suitable training and ways to review results and recover when a task fails. After installation, software versions and models need maintenance as data or equipment change, alongside support for the people using them.

The commercial viability of a solution depends not only on its technical performance but also on the costs of deploying, operating and maintaining it. Importing the necessary data, connecting to other tools and checking results before use all contribute to the cost of delivery. To assess this, developers and research organisations need to work with the intended users on a realistic task, testing not only whether the solution performs reliably, but also how much effort and cost are involved in installing, operating and supporting it in repeated use.

Robotics for nuclear inspection and remote intervention

Another important topic at DigiDECOM NuclearNEXT 2026 was the growing use of robotics for inspecting nuclear facilities and carrying out tasks that would otherwise require direct human intervention. Robotic inspection focuses on collecting measurements and other information about a facility, while remote intervention involves physical work, such as cutting or dismantling components. In both cases, connecting information from the robots to digital facility models can help operators understand where measurements are taken, monitor activities and plan subsequent work.

For radiological surveys, detector readings have been linked to the robot's position and the corresponding location or component in a digital facility model. This allows measurements to be examined in their physical context, rather than as isolated readings. The resulting information can help specialists interpret radiation conditions, identify areas requiring further investigation and plan subsequent activities.



Figure 3 Visit to the HADRON laboratory

Remote intervention presents additional challenges because the robot physically changes the facility rather than simply collecting information. In a research testbed, data from a cutting robot have been connected to a three-dimensional model,

allowing operators to monitor the robot's actual movements as work progresses. However, applying this approach in a nuclear facility requires further testing under relevant operating conditions, including communication reliability, operator supervision and the ability to recover safely when equipment or communication systems fail.

Digital twins and connected nuclear information

Digital twins and connected nuclear information systems were another important topic at DigiDECOM NuclearNEXT 2026. Beyond creating digital models, an important challenge is ensuring that the information associated with facilities, equipment and activities remains accurate, accessible and useful for different purposes. A planning model needs to represent the proposed work and relevant radiation conditions, while monitoring remote equipment requires information about what the machine is actually doing. In waste management, records need to remain linked to the correct materials and components, while assessments of deep geological repositories require calculation results to remain traceable to the data and assumptions behind them.

Work-planning simulations can represent sequences of activities and their associated radiation conditions, allowing planners to compare different arrangements before work begins and use the simulations for training. Monitoring a machine during actual operations requires a different approach, where information from the equipment updates the digital model as work progresses. In waste management, connected information systems can link facility inventories and radiological characterisation data with subsequent waste-management records. This helps preserve information about materials and components throughout their handling, including information that may be needed for later decisions.

Building information modelling (BIM) illustrates another important challenge: transferring information reliably between different software tools. BIM models represent facility components through their geometry and associated information, including object identities, properties and relationships. When a model is transferred between systems, the geometry may be preserved while some of these properties or connections are lost or altered. This can create significant problems when radiological measurements or characterisation records need to be associated with specific components. A model may still appear visually correct, even though the information required for planning or other technical decisions has been lost or incorrectly linked.

Similar requirements for information traceability arise in the assessment of deep geological repositories for radioactive waste. Calculation results need to remain linked to the input data, model assumptions and calculations from which they were produced, particularly when the results are reviewed or reused later. Comparing measurements also requires information about units, measurement times and the conditions under which the data were collected. Maintaining these connections, together with appropriate version control and access arrangements, helps ensure that technical information remains understandable and usable over time.

AI assistance and nuclear research data

AI applications for nuclear technical documentation and research data were another area of focus at DigiDECOM NuclearNEXT 2026. These applications range from finding relevant

information in extensive document collections to preparing inputs for engineering calculations and identifying unusual patterns in experimental measurements. Although they serve different purposes, they share an important requirement: the underlying information must be reliable, and specialists need to understand and verify the results before using them.

Large language model (LLM) assistants can help engineers and other professionals find and interpret information in technical documents. When designed to provide answers supported by source documents, these systems can include references or links to the original passages used to support their responses. This allows users to examine the information in context, check whether it actually supports the answer and confirm that the correct document version or requirement is being applied. Where the available documents do not provide sufficient support, the system should make this clear rather than generate an apparently confident but potentially incorrect answer.

AI can also assist in preparing input files for engineering calculations. However, producing a correctly formatted input file does not necessarily mean that the intended physical conditions have been represented correctly. Specialists still need to check the input parameters, assumptions and suitability of the selected model. Another application is the analysis of experimental measurements, where data-driven methods can identify unusual changes in individual signals or relationships between measurements that deserve further investigation. LLMs may also help specialists examine and interpret such patterns, but establishing their physical significance requires knowledge of the experiment, the measurement systems and the underlying processes.

An important foundation for these developments is the preservation and reuse of historical nuclear research data. The Halden Reactor Project, established in 1958, generated extensive fuel and materials research records. Although the Halden reactor closed in 2018, its experimental data and reports continue to support nuclear research and are available through a searchable archive with controlled access. The proposed OECD Nuclear Energy Agency (NEA) joint project HAiLDEN aims to build on these records by developing a research platform that facilitates their further use. Under the plans presented in September 2026, IFE would act as the operating agent, with an anticipated project start in early 2027.

Making effective use of historical experimental data requires more than retrieving measurements from an archive. For nuclear fuel tests, it is important to know which specimen was examined, which instruments were used, the measurement units and the conditions experienced during the experiment. Fuel cladding, the metal envelope surrounding nuclear fuel, provides a good example because its behaviour depends on its operating and irradiation history. Preserving this context allows specialists to compare experimental results and prepare suitable inputs for further analysis and modelling. However, even when the original data have been correctly retrieved and interpreted, the models used to analyse them must still be validated against experimental evidence and the relevant physical behaviour. AI can support these activities, but it cannot replace the experimental knowledge and specialist judgement needed to establish whether the results are meaningful.

People, safety and assurance in digital nuclear work

The human and organisational implications of increasing digitalisation and automation were another important focus at DigiDECOM NuclearNEXT 2026. Introducing robotics, AI and other digital technologies into nuclear work affects how tasks are planned, performed and supervised, as well as how people respond when something goes wrong. Even when a system performs parts of a task autonomously, people and organisations remain responsible for its safe use. Understanding and addressing these responsibilities is therefore an important part of developing and introducing new technologies.

Robotic applications involve several responsibilities, including preparing and authorising tasks, operating or supervising equipment, maintaining systems and recovering from faults. These responsibilities need to be clearly assigned, although several may be carried out by the same person. Operators and supervisors must have sufficient information to understand what the equipment is doing, recognise abnormal behaviour and intervene when necessary. This requires suitable interfaces, clearly defined procedures and responsibilities, and appropriate competence and training.

Assessing the safety of digital and robotic systems for nuclear applications requires more than demonstrating that the technology performs its intended function. Safety and regulatory assessments also need to consider how the system behaves during normal operation, foreseeable faults and interactions with its users. Testing may therefore include situations where sensor information is incorrect, communication is interrupted or operators need to stop or recover a task safely. The Halden Human–Technology–Organisation (HTO) programme provides a framework for studying these interactions through representative tasks and examining how technical capabilities, human performance and organisational arrangements influence safety.

Cyber-physical laboratories offer controlled environments for investigating how digital systems and their users respond to technical failures and cybersecurity incidents. For example, tests can examine the consequences of lost communication, compromised data or unexpected equipment behaviour, including whether operators can recognise the problem and respond appropriately. Such investigations can help improve system design, operating procedures and training. Where laboratory scenarios are not specifically nuclear, their relevance must be assessed against the conditions and safety requirements of the intended nuclear application.

New nuclear activity and national readiness

Norway's readiness for possible new nuclear power projects was another topic at DigiDECOM NuclearNEXT 2026. An important question is whether the country has the regulatory, institutional and industrial capabilities needed to support such developments. Selecting a suitable reactor technology is only one part of the challenge. Norway already has legislation and regulatory arrangements for nuclear activities, but introducing nuclear power would also require further development of the regulatory framework where needed, sufficient capacity within the relevant authorities, and organisations capable of meeting the responsibilities of nuclear operators and suppliers.

Regulatory readiness involves more than establishing requirements for approving new facilities. Authorities need the expertise and resources to assess applications, oversee nuclear activities

and ensure that safety requirements continue to be met throughout a facility's lifetime. Prospective nuclear power operators would need to develop the necessary competence, management systems and procedures to fulfil their responsibilities, including staffing, maintenance, safety management and radioactive waste management. Suppliers would also need to demonstrate that their products, services and working practices meet the requirements applicable to nuclear facilities.

Norway's established oil and gas industry could provide valuable engineering experience, industrial capabilities and project delivery competence for future nuclear developments. However, transferring this experience to the nuclear sector would require companies to adapt to nuclear-specific requirements for quality assurance, documentation, traceability and qualification of equipment and services. Building the necessary competence would also benefit from international research cooperation, training and technical exchange, allowing Norwegian organisations to draw on experience from countries with established nuclear power programmes.

Fuel-cycle development and commercial maritime nuclear

DigiDECOM NuclearNEXT 2026 also addressed wider developments in nuclear technology, including efforts to expand nuclear fuel recycling and the potential use of nuclear power in commercial shipping. Although these are two distinct areas, both involve challenges that extend beyond reactor technology itself. Industrial infrastructure, regulatory arrangements and cooperation between different organisations all play important roles in determining how such developments can progress.

Fuel-cycle development

The nuclear fuel cycle covers the production and use of nuclear fuel, as well as the management of spent fuel through storage, recycling and eventual disposal. Industrial reprocessing and recycling already make it possible to recover nuclear materials from spent fuel and use them to manufacture new fuel. Moving towards a more closed fuel cycle aims to enable further reuse of these materials, but requires compatible reactor and fuel technologies, fuel-fabrication capabilities and reprocessing facilities. Even with extensive recycling, some radioactive waste remains and must be managed appropriately.

Further development of the fuel cycle also raises questions about how activities can be organised across different countries. A multinational approach could allow countries to share specialised facilities and services, but moving nuclear materials between organisations and national jurisdictions requires appropriate authorisations, nuclear material accounting and clearly defined responsibilities for the resulting waste. Progress towards greater recycling therefore depends not only on technological developments but also on compatible industrial services and workable regulatory and organisational arrangements.

Commercial maritime nuclear

The potential application of nuclear power in commercial shipping presents a different set of challenges. Reactor technology needs to be integrated into a vessel and matched to its propulsion and changing power demands. Practical arrangements for maintenance and shore-based support must also be considered, while possibilities for remote monitoring and operation are still being explored.

Among the reactor technologies being investigated are liquid-fuel molten-salt reactors, in which nuclear fuel is carried in molten salt. An important technical challenge is understanding how the salt interacts with reactor materials over time. Corrosion can affect the condition and reliability of components, making materials research essential for reactor development and safety assessment. Different molten-salt reactor concepts use different fuel compositions, materials and cooling arrangements, so results obtained for one design cannot automatically be applied to another.

Automation introduces further questions about how responsibilities should be divided between a ship's crew and specialists based on shore. Both need appropriate information to understand the reactor's condition, carry out their responsibilities and respond to abnormal situations. Training, operating procedures and emergency preparedness must reflect these arrangements. Beyond the technical challenges, commercial deployment would also require suitable licensing and insurance frameworks. The newer reactor technologies and operating concepts being explored for commercial shipping are still under development, and their wider deployment will require suitable licensing and insurance arrangements.

International cooperation, communities and long-term responsibilities

Alongside technological developments, DigiDECOM NuclearNEXT 2026 also addressed the importance of international cooperation, public involvement and long-term institutional responsibilities in the nuclear sector. Professional networks and joint programmes help organisations share expertise, exchange experience and maintain research capabilities beyond individual projects. As an example of strengthening such international connections, the Norwegian Nuclear Association and the Hungarian Nuclear Society signed a memorandum of understanding during the event to support cooperation between the two associations.

Long-term nuclear waste management also depends on preserving the knowledge generated through research and technical investigations. This involves maintaining not only reports and experimental data, but also the information needed to understand how results were obtained, including the methods, assumptions and conditions involved. Such information may need to be revisited many years later, for example when assessing disposal options or evaluating the long-term performance of a repository. Keeping these records accessible and understandable requires continued support for archives, research facilities and specialist expertise, including after individual projects and funding periods have ended.

For communities potentially hosting nuclear facilities, decisions about nuclear development can have consequences for local planning, land use and the future of a site. Municipalities and residents therefore need opportunities to understand the available options, raise concerns and contribute to decisions while meaningful choices are still open. This involvement is particularly important because some of the consequences and responsibilities associated with nuclear facilities may extend well beyond the period in which the original decisions are made.

Long-term responsibilities can also continue when an operator, institution or site owner changes. Organisations taking over these responsibilities need access to the relevant records, sufficient expertise and resources, and a clear understanding of their obligations and authority. Planning for such transitions is important to ensure that responsibilities remain clear and can

be fulfilled over time. It also helps communities understand which organisations remain accountable for the facilities and activities that affect them.

The digital technologies discussed throughout this article illustrate another important challenge: moving from promising technical capabilities to applications that can be used and supported reliably in nuclear work. Connecting radiological measurements to facility models, monitoring robotic equipment and using AI to support engineering activities all require suitable data, reliable results and arrangements for maintaining the technology. Equally important is ensuring that people have the competence, information and procedures needed to assess the outputs and make appropriate decisions.

Beyond these technical developments, the wider NuclearNEXT discussions also point to the importance of maintaining knowledge, institutional capabilities and clearly defined responsibilities over time. Whether the objective is to introduce new technologies, develop future nuclear systems or manage existing nuclear facilities and their legacies, progress depends on more than individual projects or technological achievements. The organisations, expertise and information needed to support these activities must also be developed and maintained.

We thank all contributors and participating organisations for the knowledge and perspectives they brought to DigiDECOM NuclearNEXT 2026. The presentation references that follow acknowledge these contributions.

Presentation references

The following references recognise the presentations and other contributions to DigiDECOM NuclearNEXT 2026. Names and affiliations follow the programme.

Session 1. Opening keynotes on the current nuclear landscape

1. István Szőke (IFE). (2026). ‘Opening keynote: How can new capabilities help us make more sustainable nuclear decisions?’ [Opening keynote presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
2. Fredrik Holm (Norwegian Nuclear Municipalities (NKK)). (2026). ‘Keynote speech: The Norwegian nuclear landscape’ [Keynote presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
3. Helena Mrazova (IAEA). (2026). ‘Keynote speech: International Context and Role of IAEA’ [Keynote presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
4. Roger Garbil (European Commission). (2026). ‘Keynote speech: Euratom Research, Innovation and Training’ [Keynote presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
5. Meritxell Martell (Merience / SHARE Platform / GMF Europe). (2026). ‘Keynote speech: Rethinking decommissioning: reconstruction, revitalization and what I learned in Fukushima’ [Keynote presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.

6. Luc Van Den Durpel (Nuclear-21). (2026). ‘Keynote speech: Fueling a Tripling of Nuclear Energy: Illustrative Post-2040 Nuclear Fuel Cycle futures’ [Keynote presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.

Session 2. The Norwegian context

7. Ingeborg Mork-Knutsen (DSA). (2026). ‘The Norwegian Context – Status and Regulatory requirements’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
8. Mats Deleryd (Aker Solutions). (2026). ‘Transferring and unlocking Oil & Gas Capabilities to Nuclear’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
9. Ingeborg Grötterud (AFRY). (2026). ‘From Knowledge to Readiness – What Is Needed for the Next Step?’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
10. Robert Haugen (AF Gruppen). (2026). ‘Clearing up the past, building for the future’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
11. Øystein Asphjell (Thor Energy). (2026). ‘The Norwegian Thorium Adventure’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
12. Alice Rajagopal (EDF). (2026). ‘Supporting Norway: EDF's value proposition’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.

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13. Fredrik Holm (Halden Municipality). (2026). ‘Sponsor presentation: Halden Municipality’ [Sponsor presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
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Session 3. European and international R&D developments

15. Helena Mrazova (NE/NEFW/D&ER, IAEA). (2026). ‘International R&D Initiatives and Emerging Technologies in Nuclear Decommissioning’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
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18. Abdenour Benkrid (IFE). (2026). ‘Towards Autonomous Multi-Robot Fleets for Safe and Secure Nuclear Decommissioning’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.

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20. Lucian Ivan (CNL). (2026). ‘Radiation source reconstruction and visualization using AV/VR technologies to support CNL's decommissioning mission’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
21. Réka Szőke (HUN-REN EK-CER). (2026). ‘End-User Driven Digital Twins for Geological Radioactive Waste Disposal: EURAD-2 DITOCO2030’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
22. Abdenour Benkrid (IFE). (2026). ‘Coordinated Heterogeneous UGV–UAS Systems for Nuclear and Radiological Emergency Response’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.

Session 4. Future nuclear systems and applications

Part 1. Multinational European Closed Fuel Cycle

23. Erlend Hagen (Traneberget AS / Norwegian Nuclear Association). (2026). ‘Opening: Closing the fuel cycle is reemerging as a solution to our energy constraints’ [Opening presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
24. Shahab Dabiran-Zohoory (OECD NEA). (2026). ‘OECD Nuclear Energy Agency activities supporting fuel cycle closure’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
25. Xavier Domingo (Orano Recyclage). (2026). ‘Reprocessing and recycling spent nuclear fuel: 50+ years of industrial experience, future developments, and the path towards the closed fuel cycle’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
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27. Luc Van Den Durpel (Nuclear-21). (2026). ‘Spent nuclear fuel: a liability or an asset for today's and tomorrow's nuclear power plant owners?’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
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Part 2. Commercial Maritime Nuclear

29. Erlend Hagen (Traneberget AS / Norwegian Nuclear Association). (2026). ‘Opening: Nuclear power can decarbonize commercial shipping. Ongoing development, and how different reactors and their fuel fit in the larger picture’ [Opening presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
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31. Hallgeir Juliebø (Emerald Nuclear). (2026). ‘The Emerald GEM High-Temperature Gas-Cooled Reactor (HTGR) and Energy Systems: Enabling Marine Nuclear: Electric Power &

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

34. Masha Guermonprez (SPIX Industry). (2026). 'Putting the Human Back at the Centre of the Industrial Digital Landscape with a Smart Voice Assistant' [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
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38. Andreas Bye (IFE / Halden HTO). (2026). 'The Halden HTO Project' [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.

Session 6. From innovation to market-ready solutions

Part 1. Digital Planning and Decommissioning Execution

39. Andy Connell (Amentum); Olivia Harrison (Amentum). (2026). 'ThreadSafe – From Prototype to Platform: Connecting Nuclear Information with AI and Ontologies' [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
40. Melanie Müßle (KIT); Kate Clintworth (KIT); Maarten Becker (iUS GmbH). (2026). 'Development of a Scan-to-BIM Workflow to Support Clearance of Buildings in Germany' [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
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Part 2. Applied Digital Solutions

43. Kent R. Freeland (PowerKnowledge Energy Systems). (2026). 'Digital Dosimetry Solutions for Enterprise Nuclear Business and MRO/CMIS Applications' [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.

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Session 7. Nordic and international collaboration

48. Thomas Wiese (ENS / Framatome / NA^2). (2026). 'Collaboration Inside-Out and Outside-In: A European and Nordic Perspective' [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
49. Christophe Debayle (ASNR). (2026). 'Knowledge Management within the EURAD-2 Programme' [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
50. Martin Hjelmeland (Nordic Nuclear Energy AB). (2026). 'Historical Nordic Nuclear Lessons and a Path Forward' [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
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Session 8. AI/LLM applications for nuclear data

52. Réka Szőke (HUN-REN EK-CER). (2026). 'Short overview of the HRP Cladding behaviour Experiments' [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
53. Daniel Auri Schaefer (KIT). (2026). 'Long-Term Behavior of Hydrogenated Zirconium-Alloy Claddings Under Dry-Storage Conditions: The SPIZWURZ Bundle Test' [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
54. Christian Hartmann (IFE); Terje Tverberg (IFE). (2026). 'NEA Joint Project "HAiLDEN"' [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
55. Bradlee Hope Jensen (Idaho National Laboratory); Daniel J. Vanwasshenova (Idaho National Laboratory). (2026). 'From Halden Records to BISON: Traceable Nuclear Data Extraction with a Deterministic-First MCP Architecture' [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.

56. Shahab Dabiran-Zohoory (OECD NEA). (2026). ‘NEA Joint Project “AIxpertise”’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
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58. Janne Heikinheimo (VTT). (2026). ‘VTT's activities with AI/ML/LLM, especially focusing on possibilities with the Halden data utilization’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.

Session 9. Political and societal aspects of renewed nuclear interest

59. Berta Picamal Vicente (nucleareurope). (2026). ‘Political and societal aspects of new nuclear in Europe’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
60. Fredrik Holm (Halden Municipality). (2026). ‘Municipalities as leaders to study new nuclear’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
61. Ted Lind (Swedenergy). (2026). ‘Political will and public support: the state of nuclear in Sweden’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
62. Denys Nazarenko (Kyiv City Council). (2026). ‘Who answers for it: when the institution is gone?’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.
63. Sandra Faught (IAEA). (2026). ‘Learning from Nuclear Legacies to inform political and societal decision making around new nuclear developments’ [Conference presentation]. DigiDECOM NuclearNEXT 2026, Halden, Norway, 21–25 September 2026.