

DAY 1 – Tuesday (October 18th, 2022)

9:00am CET

1. Welcome Talk by invited speaker Ola Borten Moe, the Minister of Research and Higher Education
2. Welcome & Practicalities

Session 1:

Introductory presentations, including

- International needs & trends
- Innovations with high expected impact
- Synergies across industries
- Important international initiatives

Chairs: Patrick O'Sullivan (IAEA) and (IFE)

1. Introduction by Session Chairs
2. Title to be confirmed by Morten Irgens, Vice President of the AI, data and Robotics Association
3. EURATOM Research and Training Programme by BEN HADJ HASSINE Seifallah Policy officer at the European Commission
4. IAEA: Overview by IAEA, incl. introduction of the e-learning and advanced tech. working groups by Patrick Joseph O'Sullivan (IAEA)
5. NEA: Overview by NEA
6. History on Decom research in HRP / HTO and the new Nor. Centre for Nuclear Research by Andreas Bye and István Szőke (IFE)

Coffee Break

7. NND: Status and needs in the Norwegian Decom program by Nils Bøhmer (NND) and Saanio Timo (AINS)
8. DECOM Cluster for decommissioning and repurposing by Nicholas Richards (SIN) and István Szőke (IFE)
9. The Art of Statistics by Craig Nicol (Net Zero Centre, UK)
10. Digital Twins are part of the data driven toolbox at Aker BP by Pedro Nunes
11. EURATOM SHARE by Anthony Banford (NNL)

Lunch Break at 12:00pm

[Performance by the Norwegian Wind Ensemble \(Det Norske Blåseensemble\)](#)

[One of the oldest orchestras in Norway dating back to 1734 with an unbroken history. An important part of Norwegian cultural history consisting of 24 musicians playing within different music styles.](#)

Pre-recorded presentations via the Atomondo hub: virtual venue for the nuclear community.

Joint Session 2: at 14:00pm

Competence development, including

- Competence mapping and road map development
- Training with the use of XR, serious games, and other technologies
- Education

Cross disciplinary case studies, including best practices and bench marking

Chairs: Martin Andreasson (NND) & Jan Otto Porsmyr (IFE)

1. Introduction by session chairs
2. 3-D Alara Simulation Tool in Nuclear Decommissioning: First Test in an Interim Storage

Facility by Mahmoud Abdelrahman (SCK CEN)

3. Bridge the gap – New ways to attract the young generation for the nuclear industry by John Kettler (actimondo)
4. Advanced training concepts and DigiDecom Training by Archita Rajkumari & István Szőke (IFE)
5. Development of advanced technologies to meet the challenge of dismantling graphite reactors by Delphine Delvalle (EDF)

Pre-recorded presentations via the Atomondo hub: virtual venue for the nuclear community

Coffee to go + Walk till IFE

[IFE Halden \(Os Alle 5\) starts at 16:00pm](#)

Discussions and summary (2h)

Moderators: Patrick O'Sullivan (IAEA), Martin Andreasson (NND), Timothy Schatz & Markus Airila (VTT), Anthony Banford (NNL), István Szőke (IFE), Ole Jakob Ottestad (NND), Martin Brandaeur (NEA)

- Group discussions (meeting rooms at IFE)
 1. Innovation needs and opportunities in Decom, synergy across industry domains
 2. Competence development in Decom, synergy across industry domains (IAEA)
 3. Needs and examples for cross industrial initiatives
- Summaries in plenary from 17:30pm till 18:00pm (IFE Auditorium)

[*Opening night with welcome drinks and performance by the Norwegian Wind Ensemble \(Det Norske Blåseensemble\) at 19:00pm](#)

[*DigiDecom2022 dinner at 20:00pm](#)

DAY 2 – Wednesday (October 19th, 2022)

9:00am CET

Joint Session 3:

Sustainability and circular economy, including decommissioning and WM for new builds and future energy solutions

Project/decision support, including

- Project management
- Costing and Contracting
- Expert/smart decision support systems

Chairs: Federica Pancotti (Sogin), Markus Airila (VTT), Anthony Banford (NNL), Ernst Niederleithinger (BAM)

1. Introduction by session chairs
2. Presentation on sustainability and circular economy in the nuclear by Federica Pancotti (Sogin)
3. Title to be confirmed by NORSUS
4. Dismantling the BNCT facility at FIR 1 research reactor by (SWECO) Fiónan O'Carroll and FIR 1 research reactor decommissioning project – utilization of digital tools for sustainable dismantling and waste management by (Fortum) Antti Ketolainen
5. EURATOM PLEIADES by Marie-Benedicte JACQUES (CEA), Markus Airila (VTT), John Einar Hulsund (IFE) and István Szőke (IFE)
6. EURATOM MICADO Project - Cost-effective solution for non-destructing characterization of nuclear waste by CAEN Sys

Coffee Break

7. EURATOM PREDIS by Ernst Niederleithinger (BAM)
8. EURATOM PREDIS predisposal waste management digital decision platform by Réka Szőke and Tom Robert Bryntesen (IFE)
9. Innovative IT system for Nuclear Decommissioning and Waste Management by ICCircle/Ingecid
10. On the advanced tech IAEA initiative by IFE/Federica Pancotti (SOGIN)/Patrick Joseph O'Sullivan (IAEA)

Lunch break at 12:00pm

Pre-recorded presentations via the Atomondo hub: virtual venue for the nuclear community

Session 4: Roadshow at 13:00pm for sponsors of DigiDecom 2022

Platinum, Gold, Silver

Chair: John Kettler (actimondo)

1. Intro by session chair
2. Company Pitches

Session 5 :

Young Generation session at 14:20pm

Chair: PhD-Student Nancy Bellingan (FH Aachen) and John Kettler (actimondo)

1. Introduction by session chair(s)
2. Students present their projects
3. Poster/online poster awards

Coffee Break + Walk till IFE

[IFE Halden \(Os Alle 5\)](#)

Discussions and summary at 16:00pm

Moderators: Patrick Joseph O'Sullivan (IAEA), Markus Airila (VTT) Federica Pancotti (Sogin), John Kettler (actimondo), Timothy Schatz (VTT), István Szőke (IFE), Ernst Niederleithinger (BAM), Anthony Banford (NNL)

- Group discussions (meeting rooms at IFE)
 1. Role of digitalization on strategic level, for improving on lifecycle and project level
 2. Sustainability and circular economy – synergy in needs across industries, application of general concepts to nuclear (focus on role of digitalization)
 3. EURATOM PREDIS related discussion session
- Summaries in plenary at 17:30pm until 18:00pm (IFE Auditorium)

[DigiDecom 2022 dinner at 19:30pm](#)

DAY 3 – Thursday (October 20th, 2022)

9:00am CET

Joint Session 6:

Risks, safety and security management

- Risk management
- Hazard management and safety considerations
- Security (including cyber security) aspects

Risk communication including

- Public communication and acceptance
- Regulatory communication and compliance
- Regulatory aspects/expectations for the use of AI, data and robotics technologies

Chairs: Katarzyna Siegien (DSA) and Bjørn Axel Gran (IFE)

1. Introduction by session chairs
2. Title to be confirmed by Katarzyna Siegien (DSA), Norway
3. Use of digitalization in the regulatory process by Mia Ylä-Mella (STUK)
4. Holistic process for decision making on decommissioning and management of complex sites – Status of NEA HDCS Expert Group by Patrice Francois (IRSN)
5. Progress in multiple applications of autonomous radiation characterisation by Matt Mellor (Createc)
6. Information security in decommissioning projects by Nikolaos Papakonstantinou (VTT)

Coffee Break

7. EURATOM HARPER by Réka Szőke (IFE)
8. Status and benefits deriving from Digital Safety Case methods and development by Martin Brandaeur (NEA)

Lunch Break at 12:00pm

Pre-recorded presentations via the Atomondo hub: virtual venue for the nuclear community

Session 7: at 13:00pm

Special session on robotics (with cost benefit in focus), in collaboration with EGRRS

Chairs: Martin Brandauer (NEA) and Petter Leira (IFE)

1. Introduction by session chairs
2. General speech based on the report to be published EGRRS by Martin Brandaeur (NEA)
3. Specific presentation by EGRRS by Richard Reid (EPRI)
4. HADRON and the RoboDecom project by the RoboDecom consortium
5. Modular Robotics for Solutions for Decommissioning and Waste Processing by Matt Melor (Createc)
6. Example of methodology for cost-benefit-analysis in using RRS by Mustafa Ali Hadi Jarallah & Petter Leira (IFE)
7. Steam Generator dismantling using RRS by Ladislav Vargovčík (NEA)

Pre-recorded presentations via the Atomondo hub: virtual venue for the nuclear community

Coffee Break + Walk till IFE

[IFE Halden \(Os Alle 5\)](#)

Discussions and summary at 16:00pm

Moderators: Martin Brandauer (NEA), Norbert Molitor (PLEJA), Richard Reid (EPRI), Réka Szőke (IFE), Petter Leira (IFE), Patrice Francois (IRSN), Timothy Schatz (VTT), Mia Ylä-Mella (STUK)

- Group discussions (meeting rooms at IFE)
 1. EURATOM HARPERS related discussion session with HARPERS
 2. EGRRS related discussion sessions with EGRRS
- Summaries in plenary at 17:30pm (IFE Auditorium)