

PROGRAMME

Symposium on Information, Data and Knowledge Management for Radioactive Waste

Challenges Across All Timescales

7-10 October 2025
Yokohama, Japan



Hosted by

NUMO
原子力発電環境整備機構

IDKM Symposium - General information

Location

Pacifico Yokohama North (パシフィコ横浜ノース)

1 Chome-1-2 Minatomirai, Nishi Ward, Yokohama, Kanagawa 220-0012, Japan

www.pacifico.co.jp/english/guide/north

Note that the Pacifico Conference Center is very large, with multiple facilities. Please make sure to go to the North building.

Registration

Registration will open at Pacifico Yokohama North on Monday, 6 October from 16h00 to 18h00, and re-open on Tuesday, 7 October from 8h00 to 17h00. Participants will be met upon arrival by NEA staff on the conference floor and will be required to register to obtain conference badges.

Badges are to be worn when attending lectures and all other events.

A passport or another form of photo identification is required to obtain a visitor badge for the 2025 IDKM Symposium.

IDKM Symposium Programme – Day 1

Tuesday, 7 October 2025

Opening session

9:00 **Welcome and opening remarks**

William D. Magwood, IV, Director-General, Nuclear Energy Agency (NEA)

Akira Yamaguchi, President, Nuclear Waste Management Organization of Japan (NUMO)

Ulrich Noseck, Head of Safety Case Department, Gesellschaft für Anlagen- und Reaktorsicherheit (GRS), Germany; IDKM Symposium Co-Chair

Shogo Nishikawa, Safety Case Specialist, NUMO, Japan; IDKM Symposium Co-Chair

Session 2

9:30 **Overview of NEA activities in information, data and knowledge management for radioactive waste**

Chair: Shogo Nishikawa, Safety Case Specialist, NUMO, Japan; IDKM Symposium Co-Chair

Rebecca Tadesse, Head of Division, Radioactive Waste Management and Decommissioning, NEA

Session 3

10:00 **Focal session – Japan**

Chair: Takeshi Ebashi, Group Manager of Technology Integration Group, Science and Technology Department, NUMO, Japan

Policy and status of radioactive waste management industries

Hiroki Yokote, Director, Radioactive Waste Management Policy Division, Electricity and Gas Industry Department, Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry (METI), Japan

Roles and outlook of IDKM in radioactive waste management

Masahiro Shibata, Executive Director, NUMO, Japan

AI technologies and their potential applicability to the nuclear industry

Takashi Washio, Dean, Professor, Faculty of Business Data Science, Kansai University, Japan

11:15 Coffee break (30 minutes)

Session 4

11:45 Stakeholder needs and expectations for information, data and knowledge management

Co-Chairs: [Pascale Künzi](#), Specialist for Stakeholder Involvement, Swiss Federal Office of Energy (SFOE), Switzerland; [Sangjin Kim](#), PhD student in nuclear engineering, Seoul National University, Korea

Mentimeter activity

All participants

Building safety and sustaining responsibility: How we convey radioactive waste management to future generations

[Taiga Okuyama](#), student in environmental radioactivity, Graduate School of Symbiotic Systems Science and Technology, Fukushima University, Japan

The evolution of the digital safety case and its role in stakeholder participation

[Lucia Gray](#), Senior Safety Case Engineer (Post-closure), Nuclear Waste Services (NWS), United Kingdom

Video interviews with young people from Japan, Sweden and Switzerland regarding their expectations on IDKM

12:45 Lunch (60 minutes)

Panel discussion

13:45 Panel discussion: How can we consider all relevant needs when forming information, data and knowledge management strategies?

Co-Chairs: [József Fekete](#), Chief Information Security Officer, Public Limited Company for Radioactive Waste Management (PURAM), Hungary; [Elin Jonsson](#), Chair of the Final Repository Group, Östhammars Municipality, Sweden

[Ingeborg Aase Mork-Knutsen](#), Head of Department, Radiation Protection and Environment, Norwegian Radiation and Nuclear Safety Authority (DSA), Norway

[Juho Oh](#), Vice President, LILW Project Division, Korea Radioactive Waste Agency (KORAD), Korea

[Jochen Ahlswede](#), Head of Directorate-General, Research and Long-term Documentation, Federal Office for the Safety of Nuclear Waste Management (BASE), Germany

[Jan Boelen](#), Managing Director, Centrale Organisatie Voor Radioactief Afval (COVRA), Netherlands

[Vincent Maugis](#), Knowledge Management Lead, National Agency for the Management of Radioactive Waste (ANDRA), France

Session 5

14:45 **Structuring information in a safety case and the digital safety case**

Co-Chairs: Sandi Virsek, CEO, Slovenian Radwaste Management Organisation (ARAO), Slovenia; Lucia Gray, Senior Safety Case Engineer (Post-closure), Nuclear Waste Services (NWS), United Kingdom

Structuring of safety cases with examples from the German repositories

Jonathan Kindlein, Scientist, BGE, Germany

Experience of EBS optimisation in consistency with a safety case

Takafumi Hamamoto, Safety Assessment Specialist, NUMO, Japan

15:45 Coffee break (30 minutes)

Session 6

16:15 **World Café (group discussions): How can information, data and knowledge management (IDKM) stakeholders in radioactive waste management and decommissioning effectively adapt to the rapidly changing field of technology?**

All participants

Moderated discussion of specific questions in pre-assigned groups.

17:45 **End of day 1**

18:00 **Conference dinner**

IDKM Symposium Programme – Day 2

Wednesday, 8 October 2025

Keynote session

IDKM Symposium keynote session

Chair: Ulrich Noseck, Head of Safety Case Department, GRS, Germany; IDKM Symposium Co-Chair

- 9:00 ***AI in action: Enhancing data and knowledge management for nuclear safety***
Nelli Babayan, AI Director, Federal Civilian, Microsoft, United States
- 9:30 ***Embedding sustainability into the European space sector***
Andrea Vena, Chief Climate and Sustainability Officer, European Space Agency

Session 7

10:00 Knowledge management

Co-Chairs: Yngvild Sauge, Acting Head of Section, Nuclear Waste and Decommissioning, DSA, Norway; Jenny Gåling, Geologist, Swedish Nuclear Fuel and Waste Management Company (SKB), Sweden

Developing sustainable knowledge management practices with subcontractors for supporting radioactive waste disposal projects in France

Camille Arrignon, Knowledge Manager, ANDRA, France

Managing radioactive waste data, information and knowledge at Canadian Nuclear Laboratories: 75 years and beyond

Deni Priyanto, Technical Planner, Canadian Nuclear Laboratories (CNL), Canada

Intergenerational knowledge management approach at BGE

Panja Feuker, Knowledge Management Officer, BGE, Germany

11:00 Coffee break (20 minutes)

Session 8

11:20 Archiving

Co-Chairs: Barbara Habermacher, Senior Specialist Documentation, Nagra, Switzerland; Anna Bergsten, Analyst, Municipality of Östhammar, Sweden

The Great East Japan Earthquake and Disaster Memorial Museum

Noboru Takamura, Nagasaki University, Director of the Great East Japan Earthquake and Disaster Memorial Museum, Japan

Rock, paper, nanoform – The right medium for the right message

Jochen Ahlswede, Head of Directorate-General, Research and Long-term Documentation, BASE, Germany

SÚRAO's SER candidate records and their metadata profiles

Martin Eliáš, Head of the Information and Communications Technology Department, Radioactive Waste Repository Authority (SÚRAO), Czechia

12:30 Lunch (60 minutes)

Panel discussion

13:30 **Panel discussion: How to enhance collaboration between IDKM specialists, radioactive waste management professionals and nuclear development experts?**

Chair: Rebecca Tadesse, Head of Division, Radioactive Waste Management and Decommissioning, NEA

Yuko Tahara, Professor, Graduate School of Social Design; CEO, Basic Consulting; Director, Knowledge Management Society of Japan (KMSJ), Japan

Alexandru Tatomir, WP2 Knowledge Management Leader, European Partnership on Radioactive Waste Management (EURAD-2)

Stephen Yamoah, Executive Director, Nuclear Power Ghana Ltd., Ghana

Sungyeol Choi, Associate Professor, Department of Nuclear Engineering, Seoul National University, Korea

Session 9

14:30 **Futures literacy**

Co-Chairs: Florence Poidevin, Head of the Memory Programme, ANDRA, France; Pascale Künzi, Specialist for Stakeholder Involvement, Swiss Federal Office of Energy (SFOE), Switzerland

From presuming pasts to shaping futures: Archaeological insights for the safe management of radioactive waste

Cornelius Holtorf, Professor of Archaeology, UNESCO Chair on Heritage Futures, Linnaeus University, Sweden

Communication as an area of conflict between radiological, sociological and perceptual issues

Katharina Schmidt, Department for Technical Radiation Protection, Austrian Agency for Health and Food Safety GmbH (AGES), Austria

Future Design and “futurability”

Tatsuyoshi Saijo, Director, Future Design Research Center; Professor, Faculty of International Studies, Kyoto University of Advanced Science, Japan

Session 10

15:30 Long-term awareness preservation techniques

Co-Chairs: [Stephan Hotzel](#), Scientific Officer, Research and Long-term Documentation, BASE, Germany; [Eunbi Cho](#), PhD Student in Nuclear Engineering, Seoul National University, Korea

Andra's Memory for Future Generations programme

[Florence Poidevin](#), Head of the Memory Programme, ANDRA, France

Managing eternity? Conceptualising accountability amidst expert practices of spent fuel repository management

[Thomas Keating](#), Assistant Professor, Linköping University, Sweden

Beyond the repository: Nagra's concept for nuclear memory

[Barbara Habermacher](#), Senior Specialist Documentation, Nagra, Switzerland

16:30 Coffee break (30 minutes)

Panel discussion

17:00 Panel discussion: How should the future influence decisions taken in the present?

Co-Chairs: [Morgan Packer](#), Specialist, NEA; [Carl-Henrik Pettersson](#), Analyst, SSM, Sweden

[Jarmo Lehtikoinen](#), STUK, Finland

[Camille Arrignon](#), Knowledge Manager, ANDRA, France

[Cornelius Holtorf](#), Professor of Archaeology, UNESCO Chair on Heritage Futures, Linnaeus University, Sweden

[Tatsuyoshi Saijo](#), Director, Future Design Research Center; Professor, Faculty of International Studies, Kyoto University of Advanced Science, Japan

Poster session

18:00 **IDKM Symposium poster session**

19:00 **End of day 2**

IDKM Symposium Programme – Day 3

Thursday, 9 October 2025

Session 11

9:00 **The role of technology in information, data and knowledge management**

Co-Chairs: Nelli Babayan, AI Director, Federal Civilian, Microsoft, United States; David Alvarez Romero, Systems and Safety Analysis Engineer, Westinghouse Electric Spain; Board Member of Jovenes Nucleares, Spain

NEA scientific data and knowledge: Decades of achievement and future directions

Tatiana Ivanova, Head of Division, Nuclear Science and Education, NEA

Leveraging semantic web technologies for data integration in nuclear waste management and decommissioning

Illaria Maria Paponetti, PhD student, Department of Industrial Engineering, University of Bologna, Italy

Geospatial data and geographic information system (GIS) for waste management strategy and land use planning

Phil Gibson, Technical Director, Geospatial, Amentum, United Kingdom

10:00 Coffee break (30 minutes)

Session 12

11:00 **Building a holistic vision for information, data and knowledge management to manage radioactive waste across all timescales**

Co-Chairs: Hiroyuki Umeki, Integration Advisor, NUMO, Japan; Vincent Maugis, Knowledge Management Lead, National Agency for the Management of Radioactive Waste (ANDRA), France

Empowering people through technology-driven knowledge management to ensure a sustainable back end

Rebecca Tadesse, Head of Division, Radioactive Waste Management and Decommissioning, NEA

Role of integrated data and knowledge management in the siting phase of a radioactive waste disposal programme

Vaclava Havlova, Radioactive Waste Disposal Specialist, Section of Waste Technology, Division of Nuclear Fuel Cycle and Waste Technology, IAEA

Knowledge management programme of EURAD-2

Alexandru Tatomir, WP2 Knowledge Management Leader, European Partnership on Radioactive Waste Management (EURAD-2)

What does a holistic approach to information, data and knowledge management really mean?

Jasmin Böhmer, Scientific Officer, Research and Long-term Documentation, BASE, Germany

Symposium conclusions

12:15 **Ulrich Noseck**, Head of Safety Case Department, Gesellschaft für Anlagen- und Reaktorsicherheit (GRS), Germany; IDKM Symposium Co-Chair

Shogo Nishikawa, Safety Case Specialist, NUMO, Japan; IDKM Symposium Co-Chair

12:30 **End of day 3**

Site visit to Fukushima Daiichi

Friday, 10 October 2025

Registration for the site visit to Fukushima Daiichi is first-come, first-served, and offered only to a limited number of registered and paying participants. Registration was opened in May 2025 and a secondary registration step will be sent to participants who have successfully completed their registration process.

For participants who have successfully registered for the site visit, the group will depart at 6:30 from Yokohama and arrive back in Yokohama at ~22:00, depending on traffic.

We strongly recommend that participants do not make any travel arrangements to leave Yokohama the same evening as the site visit to Fukushima Daiichi in case of traffic or delays.

List of IDKM Symposium poster presentations (listed in alphabetical order by title):

1. "Can code supersede safety case? An exploratory analysis of the intersection of multi-dimensional systems of governance as a set of nominative principles (law) and postulations versus growth of complex platform-based code on safety case as it is applied to the long-term management of radioactive waste" Andrew Walters, University of Aberdeen, United Kingdom
2. "Challenges and Opportunities of an Early Key Information File (KIF) Development" Benjamin Offen, BASE; Carl-Henrik Pettersson, SSM, Sweden; Stephan Hotzel, BASE, Germany
3. "Development of a Data Management System for Site Investigations for Selecting a Deep Geological Repository Site in Japan" Hikaru Nishio; Hironori Onoe; Youichi Oshiro; Kozue Ishibashi; NUMO, Japan
4. "Guidance for Developing and Implementing a Knowledge Management Programme to Support Management of Radioactive Waste" Vincent Maugis, ANDRA, France; Mark Denton, Sellafield Ltd, United Kingdom; Alyssa Chardon Clark; Los Alamos National Laboratory (LANL), United States; Panja Feuker, BGE, Germany; Janette Meacham, Sandia National Laboratory (SNL), United States; Jozsef I. Fekete, PURAM, Hungary; Jasmin K. Böhmer, BASE, Germany; Luca Abele Picaccia, DSA, Norway; Dinara Abbasova, IAEA
5. "How Will the Present be Remembered in the Future When the Past is Forgotten in the Present?" Carl-Henrik Pettersson, SSM, Sweden
6. "Inventory Management for Informing and Underpinning Waste Management" Michelle Dickinson; Ashley Forbes; Steven Johnstone; Amentum, United Kingdom
7. "Knowledge Management Practices and Lessons Learned Following the Three Mile Island Unit 2 Cleanup" J.J. Byrne, Byrne & Associates LLC; L. Boing, Argonne National Laboratories; United States
8. "Knowledge Management Programme of EURAD-2" Alexandru Tatomir; Milena Schonhofen-Romer, BGE, Germany; Kateryna Fuzik, Scientific and Technical Center for Nuclear and Radiation Safety, Ukraine
9. "Managing knowledge on radioactive waste and waste packages for supporting the design of disposal facilities in France: From a knowledge base towards an industry platform" Véronique Béranger; Guilain Beuple, ANDRA, France
10. "Picking and Preserving the Right Records – Challenges of Information Preservation for Future Generations" Ulrick Noseck, GRS, Germany; Jasmin K. Böhmer, BASE, Germany; Jozsef Fekete, PURAM, Hungary; Martin Elias, SURAO, Czechia; Arne Berckmans, ONDRAF/NIRAS, Belgium; Charlotta Floberg, SSM, Sweden; Gordon Reid, NDA, United Kingdom; Elizabeth Norton, NDA, United Kingdom
11. "SURAO's SER Candidate Records and their Metadata Profiles" Martin Elias, SURAO, Czechia
12. "The Set of Essential Records, a tool for knowledge capture and preservation in the field of RWM" Ulrich Noseck, GRS, Germany; Vincent Maugis, ANDRA, France; Jozsef Fekete, PURAM, Hungary

13. "The use of site descriptive models to support knowledge management across the waste management lifespan" Amber Pavey; Matthew Hampson; Chris Coleman; Amentum, United Kingdom
14. "Use of artificial intelligence to support IDKM applications, the GRS approach" Frank Diershow; Seher Holger; Ulrich Noseck; GRS, Germany

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