



PROVISIONAL PROGRAMME

NEA Workshop on Innovative Techniques and Technologies to Support Characterisation and Decommissioning of Complex and Legacy Sites

29 November – 01 December
2022
France

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The Nuclear Energy Agency (NEA) Working Party on Technical, Environmental and Safety Aspects of Decommissioning and Legacy Management (WPTES) is organizing an international workshop on Innovative Techniques and Technologies to Support Characterisation and Decommissioning of Complex and Legacy Sites. For more details, please consult the concept paper developed for this workshop.

<i>Day 1 of the Workshop (29 November 2022)</i>			
Registration from 09:00 to 10:00 - please plan early arrival -			
	<i>1</i>	<u>Opening Session</u>	
10:00	1.1	Opening Remarks <i>NEA Director-General William D. MAGWOOD, IV</i>	10 min
10:10	1.2	Welcome Remarks <i>Cynthia BARR (Workshop Co-Chair) (TBC)</i> <i>TBD (Workshop Co-Chair)</i> <ul style="list-style-type: none"> - Background and Concept of the Workshop - Goals and Expected Outputs 	15 min

10:25	1.3	Introductory Session <i>Participants are requested to coordinate among themselves</i> <ul style="list-style-type: none"> - Country based Tour-de-Table: providing insights of participants, their background and expectations for the workshop; 	60 min
11:25	1.4	Status and Inputs by the Working Party WPTES <i>Cynthia BARR (Workshop Co-Chair) (TBC)</i> <ul style="list-style-type: none"> - Introduction to the Working Party on Technical, Environmental and Safety Aspects of Decommissioning and Legacy Management (WPTES) - Key Findings and Status of work 	35 min
12:00 Lunch Break (70 min)			
2		<u>Topical Session 1</u> Innovative Techniques and Technologies for Radiological and Site Characterisation	
2.1		<u>Sub-Topic:</u> Innovative Techniques and Technologies for Radiological and Site Characterisation (General)	
13:10	2.1.1	Key Findings from Workshop on the Characterisation of Large Quantities of Unconventional and Legacy Waste <i>(TBD)</i>	20 min
13:30	2.1.2	Characterization and Decommissioning Experience at Fukushima Dai-ichi (TBC) <i>(TBD)</i>	20 min
13:50	2.1.3	Characterisation of Radioactive Contamination and Radioactivity under Post-Accidental Conditions with Remote Systems at Unit 4 of Chernobyl NPP (TBC) <i>(TBD)</i>	20 min
14:10	2.1.4	Development of Technologies for the Rapid Determination of Tritium and C14 in Decommissioning Waste <i>John KRASZNAI (COG, Canada)</i>	20 min
14:30	2.1.5	Innovations on Detection of Hard-to-Measure Isotopes <i>Thomas BRAUNROTH (GRS, Germany)</i>	20 min

14:50	2.1.5	Panel Discussion with Presenters	40 min
15:30 Break (30 min)			
2.2		Sub-Topic: Innovative Techniques and Technologies for Radiological Characterisation of Buildings and Structures	
16:00	2.2.1	Robotic and Remote Technologies to Support Radiological and Site Characterisation and Decommissioning (TBC) <i>Leo LAGOS (FIU, USA)</i>	20 min
16:20	2.2.2	Advances in Radiological Characterisation of Buildings and Structures <i>Olivier GUETON (CEA, France)</i>	20 min
16:40	2.2.3	Innovative Characterization Technologies at the Magnox Swarf Storage Silo at Sellafield <i>Likely Nick Atherton (Sellafield, UK)</i>	20 min
17:00	2.2.4	Gamma Spectroscopy in Hard to Access Locations (TBC) <i>(ANSTO, Australia) (TBC)</i>	20 min
17:20	2.2.5	Panel Discussion with Presenters	40 min
Group Picture			
18:00		<i>End of Day 1</i>	
Reception (TBC)			

Day 2 of the Workshop (30 November 2022)			
Registration from 08:30 to 09:00			
2.3		Sub-Topic: Innovative Techniques and Technologies for Radio- logical and Site Characterisation of Land	
09:00	2.3.1	Independent Verification Surveys Focused on Discrete Radioactive Particles <i>David KING (ORAU, USA) - virtual</i>	20 min
09:20	2.3.2	Use of Unmanned Ground or Aerial Vehicles for Radiological Characterisation <i>(TBD)</i>	20 min
09:40	2.3.3	Airborne Sensing and Deep Learning Mapping Methods for of Safety Assessment and Optimisation of Remedial Measures in the Chornobyl Exclusion Zone (TBC) <i>Peter KRZYTEK, Sebastian BRIECHLE (MUAS, Germany) and Norbert MOLITOR (Plejades GmbH, Germany)</i>	20 min
10:00	2.3.4	Policy, Strategy and Risk Assessment Methods to Allow Reuse of Waste for a Purpose as Part of Nuclear Site Regeneration <i>Frank WIGLEY/Andrew FAIRHURST (NDA, UK) (TBC)</i>	20 min
10:20	2.3.5	Panel Discussion with Presenters	40 min
11: 00 Break (30 min)			
2.4		Sub-Topic: Innovative Techniques and Technologies for Surveys of Subsurface Soils and Groundwater	
11:30	2.4.1	Advances in Non-Invasive Technologies for Subsurface Characterisation <i>(PNNL, USA) (TBC)</i>	20 min
11:50	2.4.2	A Graded Approach to Subsurface Characterisation and Related Tools and Methods	20 min

		<i>Matt DAROIS (RSCS, USA)</i>	
12:10	2.4.3	Data Visualisation for Survey Design and Spatial Analysis Tools to Support Subsurface Decision-making <i>Robert STEWARD (ORNL, USA) – virtual (TBC)</i>	20 min
12:30	2.4.4	Case Studies on Use of Geostatistical Techniques to Facilitate Decommissioning Decision-Making Applied to Subsurface Problems <i>Prof. Pierre Goovaerts (BioMedware, Inc.)</i>	20 min
12:50	2.4.5	Panel Discussion with Presenters	30 min
13:20 Lunch Break (70 min)			
3		<u>Topical Session 2</u> Innovative Decontamination and Decommissioning Technologies and Good Practices for Implementation of Technologies	
3.1		Sub-Topic: Innovative Technologies used in D&D	
14:30	3.1.1	Advances in Decommissioning Technologies <i>Lawrence E. BOING (ANL, USA)</i>	20 min
14:50	3.1.2	Advances in Decontamination Technologies <i>(TBD)</i>	20 min
15:10	3.1.3	New Technology Development Report – EC H2020 Report from Laser Dismantling and Safety Assessment Consortium (TBC) <i>(Onet Technologies, France) (TBC)</i>	20 min
15:30	3.1.4	Innovative Technologies for Soil Decontamination <i>Anne FORNIER (CEA, France)</i>	20 min
15:50	3.1.5	Panel Discussion with Presenters	30 min
16:20 Break (30 min)			

4		<u>Group Activity</u>	
16:50	4.1	Warm-up Exercise: Opinion Barometer <i>All Participants</i>	10 min
17:00	4.2	Breakout-Groups <i>All Participants</i>	60 min
18:00		<i>End of Day 2</i>	

<i>Day 3 of the Workshop (01 December 2022)</i>			
Registration from 08:30 to 09:00			
3.2		Sub-Topic: Good Practices for application of D&D Technologies to Reduce Overall Risk	
09:00	3.2.1	Fleet Approach to Reduce Overall Risk based on Lessons Learnt (TBC) <i>(Preussen Elektra, Germany) (TBC)</i>	20 min
09:20	3.2.2	Advances on Safety Assessment Approaches Minimising Dose and Waste Generation <i>(TBD)</i>	20 min
09:40	3.2.3	Advanced Modelling Technologies and Their Practical Validation <i>(TBD)</i>	20 min
3.3		Sub-Topic: Lessons Learnt Associated with Application of Innovative Technologies	
10:00	3.3.1	Lessons Learnt from New Technology Development – Hands-on Experience <i>(TBD)</i>	20 min
10:20	3.3.2	Regulatory Challenges Associated with Implementation of Innovative Technologies <i>Theo NEUFFER (UMBW, Germany)</i>	20 min
10:40	3.3.3	Supply Chain Engagement to Support Innovation (TBC) <i>(TBC)</i>	20 min
11:00 Break (30 min)			
11:30	2.3.4	Panel Discussion with Presenters	40 min
5		<u>Collection Of Key Findings</u>	

12:10	5.1	Key Findings of Session 2	20 min
12:30	5.2	Key Findings of Breakout 1	15 min
12:45	5.3	Key Findings of Breakout 2	15 min
13:00 Lunch Break (80 min)			
14:20	5.4	Key Findings of Session 3	20 min
14:40	5.5	Plenary Discussion	20 min
	6	<u>Conclusion Session</u>	
15:00	6.1	Feedback from Participants <i>Participants are requested to coordinate among themselves</i> <ul style="list-style-type: none"> - Country based Tour-de-Table: providing insights of participants; 	60 min
16:00	6.2	Plenary Discussion of the Findings <i>All Participants</i>	30 min
16:30 Break (30 min)			
	7	<u>Conclusion Session</u>	
17:00	7.1	Main Outcome of the Workshop <i>Report by Workshop Chairs</i> <i>Contributions and Confirmation by Participants</i>	30 min
17:30	7.2	Definition of Next Steps <i>All Participants</i>	20 min
17:50	7.2	Closing Remarks <i>Workshop Chairs</i>	10 min
18:00		Workshop Adjourn	