



Atoms for Peace and Development

الوكالة الدولية للطاقة الذرية
国际原子能机构
International Atomic Energy Agency
Agence internationale de l'énergie atomique
Международное агентство по атомной энергии
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In reply please refer to: **EVT2103801**
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The Secretariat of the International Atomic Energy Agency (IAEA) presents its compliments to the IAEA's Member States and has the honour to draw their attention to the **Technical Meeting on New and Emerging Technologies to Advance Decommissioning Projects** (hereinafter referred to as "event") to be held at the IAEA's Headquarters in Vienna, Austria, from **29 August to 2 September 2022**.

In addition, the event will allow for virtual participation via Microsoft Teams.

The purpose of the event is to provide a forum for the exchange of information and lessons learned from the practical implementation of new and emerging technologies to advance decommissioning projects.

The attached Information Sheet provides further details of the event.

The event will be held in English.

Member States are invited to designate one or more participants to represent the Government at this event. Member States are strongly encouraged to identify suitable women participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the event. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Upon specific request, such assistance may be offered to normally one participant per country, provided that, in the IAEA's view, the participant will make an important contribution to the event. The application for financial support should be made at the time of designating the participants using the attached Grant Application Form (Form C).

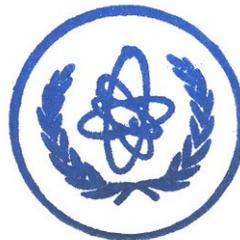
It should be noted that compensation is not payable by the IAEA for any damage to or loss of personal property. The IAEA also does not provide health insurance coverage for participants in IAEA events. Arrangements for private insurance coverage on an individual basis should therefore be made. The IAEA will, however, provide insurance coverage for accidents and illnesses that clearly result from any work performed for the IAEA.

Designations should be submitted to the IAEA through the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) not later than **12 July 2022** using the attached Participation Form (Form A). Completed and authorized Participation Forms should be sent either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Copies should be sent by email to the Scientific Secretary of the event, Mr Masahiro Yagi, Division of Nuclear Fuel Cycle and Waste Technology, Department of Nuclear Energy (Email: M.Yagi@iaea.org), and to the Administrative Secretary, Ms Marina Tolstenkova (Email: M.Tolstenkova@iaea.org). The Scientific Secretary of the event will liaise with the participants directly concerning further arrangements, including travel details, as appropriate, once official designations have been received.

Should Governments wish, in addition, to appoint one or more observers to assist and advise the designated participants, they are kindly requested to inform the IAEA of the names and contact details of any such observers by the above date. In accordance with the established rules, Governments are expected to bear the cost of attendance of any observers they may send to IAEA events. Compensation is not payable by the IAEA for any damage to or loss of observers' personal property or for illness, injury or death occurring while travelling to or in connection with their attendance at IAEA events.

The IAEA takes no responsibility for, and the provider of the virtual meeting services has represented and warranted that the Services shall not contain, and that no end user shall receive from the software used to hold the virtual meeting, any virus, worm, trap door, back door, timer, clock, counter or other limiting routine, instruction or design, or other malicious, illicit or similar unrequested code, including surveillance software or routines which may, or is designed to, permit access by any person, or on its own, to erase, or otherwise harm or modify any data or any system, server, facility or other infrastructure of any end user (collectively, a "Disabling Code").

The Secretariat of the International Atomic Energy Agency avails itself of this opportunity to renew to the IAEA's Member States the assurances of its highest consideration.



2022-06-09

Enclosures: Information Sheet
 Participation Form (Form A)
 Grant Application Form (Form C)



Technical Meeting on New and Emerging Technologies to Advance Decommissioning Projects

IAEA Headquarters, Vienna, Austria
and virtual participation via Microsoft Teams

29 August – 02 September 2022

Ref. No.: EVT2103801

Information Sheet

Introduction

The typical age profile of global fleets of nuclear facilities is such that many nuclear facilities are likely to be shut down over the next 1-2 decades and require subsequent decommissioning, resulting in increased needs for timely and cost-effective implementation of decommissioning programmes in line with stringent safety standards. In this context, an increasing number of Member States are exploring options for making greater use of new and emerging technologies, such as digitalization and associated technological developments. Use of such technologies may bring a range of benefits:

- Ensuring greater efficiency in the implementation of decommissioning work, making optimal use of available human, financial and technological resources
- Minimizing radiation exposure of the workforce
- Facilitating the provision of information to regulatory agencies and the public to improve understanding of decommissioning activities
- Facilitating the effective transfer of knowledge and experience gained between current and future workforces.

A Technical Meeting was held in November 2021 on Advancing Human Resource Development and Competence Building for Decommissioning (EVT2003930, Caorso, Italy). This event was concerned with the emerging role of digitization and related technological developments to support the implementation of decommissioning projects, including in the areas of information management, decommissioning planning and human resource development. An outcome of the meeting was a suggestion to explore the possibility of launching a collaborative activity aimed at enhancing the contribution of digital technologies to data management and modelling activities in decommissioning.

The above suggestion was explored further at a Consultancy Meeting held in May 2022 (EVT2201332,

Vienna International Centre). This meeting developed ideas for collaboration on a range of topical issues in the domain of data management and modelling in decommissioning, including an outline of specific tasks that might be undertaken as part of a new collaborative project. The meeting also developed draft terms of reference for such a project, to be tabled for consideration at this Technical Meeting.

Objectives

The purpose of the event is to provide a forum for the exchange of information and lessons learned from the practical implementation of new and emerging technologies to advance decommissioning projects.

The meeting will also serve as a launch event for a new collaborative project to provide information on the new and emerging digital tools and technologies, used in data management, planning, licensing and implementation of decommissioning. The project will include information on experiences gained from the practical application and case studies from Member States, based a range of different decommissioning challenge complexity and varying levels of information.

The proposed collaborative project will provide analysis of the challenges, benefits, and limitations for the utilization of new and emerging technologies that are applicable to different levels of information and to decommissioning challenge complexity. Draft terms of reference for the planned collaborative activity will be discussed and, if possible, finalized at the Technical Meeting.

Target Audience

Representatives on national and international organizations concerned with this topic are invited to participate in the event, including:

- government officials with policy responsibility for decommissioning and associated waste management.
- managers of regulatory authorities.
- managers of the nuclear facility operating organizations.
- managers and planners from decommissioning organizations/projects'
- researchers such as in universities or research institutions developing the e-tools for capacity building of workers for decommissioning and environmental remediation
- officials from concerned international organizations.

Topics

Three specific topics are envisaged to be addressed at the outset, though discussion at the meeting will not be limited to these:

1) Digital model selection for variety of different decommissioning challenges during planning and implementation

Scope: to select and apply the most appropriate digital technologies to meet a variety of decommissioning challenges.

Challenge being addressed: new facilities that are being constructed on the site are generally utilizing the latest Building Information Modelling (BIM) methodologies, but these are typically based on a detailed digital model that is generated during the design stage of the project. For legacy facilities such detailed

models are not available, so consideration needs to be given to whether a digital model will provide benefits for the decommissioning and waste management and if so, which type of model is suited to which of each type of facility and decommissioning challenge.

2) Technologies for conversion of unstructured legacy data into a structured format connected to digital model of facility

Scope: capturing case studies and lessons learned on the conversion of the unstructured data to structured format by using digital tools. Case studies may include the connection of the data to the facility models and their use for compliance or configuration management.

Challenge being addressed: many older sites have large amounts of legacy unstructured data in various formats. There is currently significant interest on the optimal approaches to management of and extraction of value from legacy data. Progress has been made in this area with the use of methods to extract and structure this data using tools such as artificial intelligence, natural language processing and optical character recognition.

3) Emerging technologies for the generation of detailed digital models from Point Cloud data including the use of automated digital tools

Scope: to select and apply the most appropriate digital technologies to generate detailed digital models from Point Cloud data using of automated processes where possible

Challenge being addressed: there exist a number of emerging technologies e.g., providing capability to model pipework represented on Point Clouds to 3D computer-aided design (CAD) type models. This collaboration area will seek to identify and test a number of these new and emerging technologies by practical application.

Working Language(s)

English

Participation and Registration

All persons wishing to participate in the event have to be designated by an IAEA Member State or should be members of organizations that have been invited to attend.

In order to be designated by an IAEA Member State, participants are requested to send the **Participation Form (Form A)** to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for onward transmission to the IAEA by **12 July 2022**. Participants who are members of an organization invited to attend are requested to send the **Participation Form (Form A)** through their organization to the IAEA by the above deadline.

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and financial matters.

Expenditures and Grants

No registration fee is charged to participants.

Online participants will not be considered for receipt of financial support.

The IAEA is generally not in a position to bear the travel and other costs of participants in the event. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Upon specific request, such assistance may be offered to normally one participant per country, provided that, in the IAEA's view, the participant will make an important contribution to the event.

The application for financial support should be made using the **Grant Application Form (Form C)**, which has to be stamped, signed and submitted by the competent national authority to the IAEA together with the **Participation Form (Form A)** by **12 July 2022**.

Venue

The event will be held at the Vienna International Centre (VIC), where the IAEA's Headquarters are located. Participants must make their own travel and accommodation arrangements.

General information on the VIC and other practical details, such as a list of hotels offering a reduced rate for IAEA participants, are listed on the following IAEA web page:

www.iaea.org/events.

Participants are advised to arrive at Checkpoint 1/Gate 1 of the VIC one hour before the start of the event on the first day in order to allow for timely registration. Participants will need to present an official photo identification document in order to be admitted to the VIC premises.

Organization

Scientific Secretary

Mr Masahiro Yagi

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International Atomic Energy Agency
Vienna International Centre
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AUSTRIA
Tel.: +43 1 2600 24545
Email: M.Yagi@iaea.org

Administrative Secretary

Ms Marina Tolstenkova

Division of Nuclear Fuel Cycle and Waste Technology, Department of Nuclear Energy
International Atomic Energy Agency
Vienna International Centre
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AUSTRIA

Tel.: +43 1 2600 22932

Email: M.Tolstenkova@iaea.org

Subsequent correspondence on scientific matters should be sent to the Scientific Secretaries and correspondence on other matters related to the event to the Administrative Secretary.



Participation Form

Technical Meeting on New and Emerging Technologies to Advance Decommissioning Projects

Hybrid Event

29 August to 2 September 2022

To be completed by the participant and sent to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA) either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretary, Mr Masahiro Yagi, Division of Nuclear Fuel Cycle and Waste Technology, Department of Nuclear Energy (Email: M.Yagi@iaea.org) and to the Administrative Secretary, Ms Marina Tolstenkova (Email: M.Tolstenkova@iaea.org).

Participants who are members of an invited organization can submit this form to their organization for subsequent transmission to the IAEA.

Deadline for receipt by IAEA through official channels: 12 July 2022

Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms
Institution:		
Full address:		
Tel. (Fax):		
Email:		
Nationality:	Representing following Member State/non-Member State/entity or invited organization:	
If/as applicable:		
Do you intend to submit a paper?	Yes	No
Would you prefer to present your paper as a poster?	Yes	No
Title:		

Participants are hereby informed that the personal data they submit will be processed in line with the [Agency's Personal Data and Privacy Policy](#) and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. Further information can be found in the [Data Processing Notice](#) concerning IAEA InTouch+ platform.

Grant Application Form

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Deadline for receipt by IAEA through official channels: 12 July 2022

Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms:
Mailing address:	Tel.:	
	Fax:	
	Email:	
Date of birth (yyyy/mm/dd):	Nationality:	

1. Education (post-secondary):

Name and place of institution	Field of study	Diploma or Degree	Years attended	
			from	to

2. Recent employment record (starting with your present post):

Name and place of employer/ organization	Title of your position	Type of work	Years attended	
			from	to

3. Description of work performed over the last three years:

4. Institute's/Member State's programme in field of event:

Date: _____ **Signature of applicant:** _____

Date: _____ **Name, signature and stamp of Ministry of Foreign Affairs,
Permanent Mission to the IAEA or National Atomic Energy
Authority**
