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International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

Organismo Internacional de Energia Atomica

National Liaison Officer

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In reply please refer to: C1-RER/9/143/9007/01

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2016-06-22

Subject:

Invitation to a Workshop on Modular Design and Operation of Mobile Processing and Storage Facilities for Small Users, Belgrade, Serbia, 14 – 18 November 2016

Dear National Liaison Officer,

I am pleased to invite you to send nominations of suitable candidates to participate in the above-mentioned workshop under the framework of TC Project RER/9/143 – ‘Enhancing Radioactive Waste Management Capabilities’. The purpose of the workshop and related information are outlined in the attached Prospectus.

For candidates who are selected by the IAEA, the IAEA will cover the cost of return international travel from the home country to Belgrade, Serbia and provide Daily Subsistence Allowance (DSA) for the duration of the workshop in line with IAEA rules and procedures.

Please submit nominations to the IAEA online through the Technical Cooperation Department's InTouch system (<http://intouch.iaea.org>). Only if this is not possible, nominations may be submitted on the Nomination Form for Workshop available on the IAEA website: <http://www.iaea.org/technicalcooperation/How-to-take-part/In-meetings-WS/index.html>. Completed forms should be endorsed by relevant national authorities and sent to the Programme Management Officer for this project, Mr Andrejs Salmins (IAEA Official Fax: +43-1-26007 or E-Mail Official.Mail@iaea.org), through the official channels, i.e. the designated National Liaison Office for IAEA matters, not later than **31 August 2016**.

Yours sincerely,

Martin Krause

Director

Division for Europe

Department of Technical Cooperation

Enclosure: Prospectus

International Atomic Energy Agency

Regional Workshop on Modular Design and Operation of Mobile Processing and Storage Facilities for Small Users

PROSPECTUS

Project Number & Title: RER9143 “Enhancing Radioactive Waste Management Capabilities”

Place (City, Country): Belgrade, Republic of Serbia

Dates: 14 – 18 November 2016

Deadline for Nominations: 31 August 2016

Organizers: The International Atomic Energy Agency (IAEA) in collaboration with the Government of Serbia through the Public Company "Nuclear Facilities of Serbia"

Host Country Organizer: Mr Milutin Jevremović
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Language: English

Purpose: The IAEA Regional Workshop on “*Modular Design and Operation of Mobile Processing and Storage Facilities for Small User*” focuses on supporting Member States generating relatively small volumes of low and intermediate level radioactive waste, including disused sealed radioactive sources. Such waste arises as a result of the application of nuclear techniques

in medicine, industry, agriculture and research. The workshop objective is to enhance radioactive waste management capabilities in these Member States by informing participants about developments, opportunities and issues relating to the design and operation of modular facilities and to enable them to specify requirements and eventually operate such facilities safely and securely.

**Expected
Output(s):**

A wide variety of designs exist for modules intended for the treatment and conditioning of different waste streams. Options are also available for the construction and operation of modular interim storage facilities. Based on knowledge derived from the structured presentations, exercises and discussions to be provided during the workshop, participants will develop a comprehensive understanding of the opportunities for designing and operating modular facilities for the treatment, conditioning and storage of relatively small volumes of radioactive waste, as appropriate for national circumstances. More specifically, participation in the workshop will permit participants to determine and specify national requirements to allow the procurement of appropriate processing and storage modules; install those modules and to eventually operate them independently. Most modular components could be fabricated using local materials and skills, so that the following benefits could potentially be realised in each Member State: (a) radioactive waste management undertaken more safely, securely, and sustainably; (b) timely and efficient adaptation to the introduction of new waste streams, as required; and (c) positive economic, technological and human resource returns.

**Scope and
Nature:**

The workshop will be based on a common understanding of the types and quantities of liquid and solid waste streams that typically arise through the application of nuclear technologies in countries without significant nuclear infrastructure. The topics to be covered include process descriptions and an overview of the technologies available for the treatment and conditioning of radioactive waste, as well as safety requirements and management and operating guidelines based on best international practices. This understanding will in turn lead on to a more detailed consideration of functional requirements for the design and specification of appropriate processing and storage modules and associated equipment and also the various options available. Information will then be provided about more specific technical requirements relating to the mechanical handling of waste during treatment and conditioning operations, as well as needs and solutions relating to the provision of mechanical and electrical equipment, environmental control, maintenance and inspection. There will also be a consideration of requirements relating to seismicity, radiation and industrial safety, physical protection, etc. On the basis of these requirements and design and operation considerations, guidance will be provided to support the development of procurement specifications for modular facilities. The Regional Workshop will include lectures, case studies and structured discussions led by invited external experts. The workshop will also include exercises to allow participants to put into practice the knowledge and understanding derived from the presentations and discussions.

Background Information:

Every Member State that uses nuclear technology generates radioactive waste. Such waste needs to be processed through segregation, treatment, conditioning and packaging to be either stored on an interim basis, discharged to the environment, reused, transferred to another responsible entity or disposed of. In Member States without major nuclear programmes, safe and secure facilities to manage waste may be non-existent or limited. Even where treatment and conditioning facilities already exist, fixed designs may not be adequate to meet the different needs of Member States because of capacity limitations or the wide variation in the types of radioactive waste that may be generated over time. One very effective way to achieve the required waste processing flexibility is to develop a facility design based on a variety of modules for different waste stream treatment and conditioning processes and for storage. Each module can be constructed locally or pre-fabricated and combined with other modules to meet country specific needs.

Participation:

The workshop is aimed at Member States that generate small volumes of low and intermediate level radioactive waste, including disused sealed radioactive sources. All TCEU Member States, who are participating in the RER9143, could benefit from this workshop, but in the selection priority will be given to those Member States that do not have facilities for processing and storing their radioactive waste as well as other Member States that may have existing waste processing facilities, but that are in need of varying degrees of upgrading or expansion so as to address the introduction of new waste streams, incorporate new waste processing technologies, or to increase interim storage capacities.

Although the workshop is specifically designed for these countries participating in the Technical Cooperation Regional Project 9143, it also provides an opportunity to engage potential participants from other Member States with national projects devoted to radioactive waste management, decommissioning and environmental remediation.

Participants' Qualifications:

Participants should be specialists in radioactive waste management. They should be mainly operators of radioactive waste processing and storage facilities although depending on the number of applications received. Some relevant nominations may be also considered from regulatory or technical support organisations with responsibility for radioactive waste management and other institutions which have responsibilities relevant to the operation and development of waste management facilities.

Participants are expected to prepare presentations that summarise existing and projected radioactive waste inventories and current arrangements for the treatment, conditioning and storage of waste, especially highlighting recognised challenges and issues as well as potential solutions.

**Nomination
Procedure:**

Please submit nominations to the IAEA online through the Technical Cooperation Department's InTouch system (<http://intouch.iaea.org>). Only if this is not possible, nominations may be submitted on the Nomination Form for Meeting/Workshop available on the IAEA website: <http://www.iaea.org/technicalcooperation/How-to-take-part/In-meetings-WS/index.html>. Completed forms should be endorsed by relevant national authorities and sent to the Programme Management Officer for this project, Mr Andrejs Salmins (IAEA Official Fax: +43-1-26007 or E-Mail Official.Mail@iaea.org), through the official channels, i.e. the designated National Liaison Office for IAEA matters, not later than **31 August 2016**.

**Administrative
and Financial
Arrangements:**

Nominating Governments will be informed in due course of the names of the candidates who have been selected and will, at that time, be given full details of the procedures to be followed with regard to administrative and financial matters. Selected participants from countries eligible to receive technical assistance will be provided with a round trip economy class air ticket from their home countries to Belgrade, Republic of Serbia, and a Daily Subsistence Allowance (DSA) at the prevailing UN Rate. Shipment of accumulated workshop materials to the participants' home countries is not the responsibility of the IAEA.

The organizers of the workshop do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a participant while he/she is travelling to and from or attending the workshop, and it is clearly understood that each Government, in nominating participants, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.