



RER/9/155 Enhancing Regulatory and Metrological Infrastructures Needed to Ensure Radiation Safety in Naturally Occurring Radioactive Materials Industry

Regional Workshop on Evaluation and Finalization of the Intercomparison Exercise on Radioanalytical Analysis of NORM Samples

Hosted by

The Government of Türkiye (*)

through the

Turkish Energy, Nuclear and Mineral Research Agency

Ankara, Türkiye (*)

05 to 07 July 2023

Ref. No.: ME-RER9155-2301382

Information Sheet

Purpose

The purpose of the regional workshop is to assess the progress, the findings and results of the regional Intercomparison Exercise on Radioanalytical Analysis of NORM samples which was conducted under the TC project RER/9/155.

The overarching aim of the Intercomparison (IC) exercise is to assess the capabilities of the Member States in the region to implement appropriate radioanalytical techniques (i.e., γ -spectrometry, alpha spectrometry, Liquid Scintillation) for the radiological characterization of naturally occurring radioactive material (NORM) in line with the IAEA safety standards, particularly GSG-7, with a primary focus on radiation protection of workers in industrial processes involving NORM.

NORM samples for analysis were prepared by the Environmental Radioactivity Monitoring Unit of the Greek Atomic Energy Commission (EEAE) and the IC exercise was participated by 30 radioanalytical laboratories from 25 countries in Europe region of the IAEA.

(*) *Subject to the acceptance of the Host Government Agreement*

Working Language(s)

The working language of the workshop will be English.

Deadline for Nominations

Nominations received after **22 May 2023** will not be considered.

Project Background

Naturally occurring radiative material (NORM) is radioactive material containing no significant amounts of radionuclides other than naturally occurring radionuclides. The most important factor for the purposes of radiation protection are the radionuclides in the Uranium-238 (U-238) and Thorium-232 (Th-232) decay series.

For most human activities involving minerals and raw materials, the levels of exposure to these radionuclides are not significantly greater than normal background levels and are not of concern for radiation protection. However, certain work activities can give rise to significantly enhanced exposures that may need to be controlled by robust regulation.

The International Basic Safety Standards (GSR Part 3) sets the radiation protection requirements for regulatory bodies, technical service providers, industry operators and workers. These requirements are applicable to different industrial activities involving NORM under planned and existing exposure situations emphasizing that consideration needs to be given to the radiation protection of the workers, the public and the environment for which guidance is provided in GSG-7.

The main focus area of the regional project is the coherent application of GSR Part 3 to natural radiation sources, in particular to workplaces and to industrial processes involving NORM.

Expected Outputs

Assessment and evaluation of the findings and results of the Regional Intercomparison Exercise on Individual Monitoring for External Exposure which was conducted under the TC project RER/9/155.

Understanding of the results of the intercomparison exercise with the corresponding regulatory requirements and on performing the required dose assessment in industries involving NORM.

Scope and Nature

The regional workshop will be conducted with a series of presentations, site visits to relevant laboratories, and interactive group discussions. Moreover, representatives of the laboratories will be requested to present the techniques applied in the framework of the IC exercise focusing on the challenges faced.

Member States will discuss the IC report content and guidelines to improve the performance of their existing capabilities in line with the project milestones

Participation

The evaluation workshop is only open to the IC exercise official participants and all 30 official representatives of participating laboratories (Annex 1) will be accepted under the project RER/9/155, subject to the availability of funds.

The official Member States participants of the IC exercise are Albania, Armenia, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Georgia, Greece, Hungary, Lithuania, Montenegro, North Macedonia, Poland, Portugal, Romania, Russian Federation, Serbia, Slovakia, Türkiye.

Member States are requested to nominate the same persons as in the previous event: “Regional Workshop on Radioanalytical Analysis of NORM samples and Intercomparison Exercise, RER9155-EVT2201679”, which was conducted in Athens /Greece from 18 to 22 July 2022.

Participants’ Qualifications and Experience

The workshop is intended for individuals who are official participants of the IC exercise and working in radioanalytical laboratories and who already have demonstrated experience in the field of NORM radiological characterization and would like to improve their skills further.

The participants have to be fluent in English language.

Participants must be nominated by the competent national authority of the Member State and, most specifically, by the Member States’ official counterpart for the project.

Application Procedure

Candidates wishing to apply for this event should follow the steps below:

1. Access the InTouch+ home page (<https://intouchplus.iaea.org>) using the candidate's existing Nucleus username and password. If the candidate is not a registered Nucleus user, she/he must create a Nucleus account (<https://websso.iaea.org/IM/UserRegistrationPage.aspx>) before proceeding with the event application process below.
2. On the InTouch + platform, the candidate must:
 - a. Finalize or update her/his personal details, provide sufficient information to establish the required qualifications regarding education, language skills and work experience ('Profile' tab) and upload relevant supporting documents;
 - b. Download and complete the Designation of Beneficiary and Emergency Contact Form, and upload to InTouch+ ('Profile' tab under the personal section) specifying the document name. If already provided, kindly discard this step; and
 - c. Search for the relevant technical cooperation event (**EVT2301382**) under the 'My Eligible Events' tab, answer the mandatory questions and lastly submit the application to the required authority.

NOTE: Completed applications need to be approved by the relevant national authority, i.e. the National Liaison Office, and submitted to the IAEA through the established official channels by the provided designation deadline.

For additional support on how to apply for an event, please refer to the [InTouch+ Help page](#). Any issues or queries related to InTouch+ can be addressed to InTouchPlus.Contact-Point@iaea.org.

NOTE: Should online application submission not be possible, candidates may download the nomination form for a meeting from the [IAEA website](#) and submit their applications to their National Authorities. The nomination forms once fully approved can be submitted by e-mail in a PDF format through the official channels via the IAEA Official E-Mail (Official.Mail@iaea.org) with copy to Ms Emina Alic (E.Alic@iaea.org) and Mr Bru (Y.Bru@iaea.org).

NOTE: A medical certificate signed by a registered medical practitioner dated not more than four months prior to starting date of the event must be submitted by candidates when applying for a) events with a duration exceeding one month, and/or b) all candidates over the age of 65 regardless of the event duration.

Administrative and Financial Arrangements

Nominating authorities will be informed in due course of the names of the candidates who have been selected and will at that time be informed of the procedure to be followed with regard to administrative and financial matters.

Selected participants will receive an allowance from the IAEA sufficient to cover their costs of lodging, daily subsistence and miscellaneous expenses. They will also receive either a round-trip air ticket based on the most direct and economical route between the airport nearest their residence and the airport nearest the duty station through the IAEA's travel agency American Express, or a travel grant, or they will be reimbursed travel by car/bus/train in accordance with IAEA rules for non-staff travel.

Disclaimer of Liability

The organizers of the event 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 event, and it is clearly understood that each Government, in approving his/her participation, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.

Note for female participants

Any woman engaged by the IAEA for work or training should notify the IAEA on becoming aware that she is pregnant.

The Board of Governors of the IAEA approved new International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources. The Standards deal specifically with the occupational exposure conditions of female workers by requiring, inter alia, that a female worker should, on becoming aware that she is pregnant, notify her employer in order that her working conditions may be modified, if necessary. This notification shall not be considered a reason to exclude her from work; however, her working conditions, with respect to occupational exposure shall be adapted with a view to ensuring that her embryo or foetus be afforded the same broad level of protection as required for members of the public.

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ANNEX-1: Official Participants of the Intercomparison Exercise on Radioanalytical Analysis of NORM Samples

	Laboratory Name	Member State
1.	Gamma Spectrometry Laboratory, Institute of Applied Nuclear Physics (IANP)	Albania
2.	Armenian Nuclear Regulatory Authority; Armenian Nuclear Power Plant (ANPP) Environmental Monitoring Laboratory	Armenia
3.	Faculty of Veterinary Medicine	Bosnia and Herzegovina
4.	Radiation Protection Center	Bosnia and Herzegovina
5.	National Center of Radiobiology and Radiation Protection	Bulgaria
6.	Institute for Medical Research and Occupational Health (IMI)	Croatia
7.	Radioactivity Lab for Food and Environmental Samples, State General Laboratory	Cyprus
8.	National Radiation Protection Institute	Czech Republic
9.	Environmental Board, Climate and Radiation Department	Estonia
10.	Georgian LEPL Agency of Nuclear and Radiation Safety (Mobile Laboratory)	Georgia
11.	Greek Atomic Energy Commission (EEAE)	Greece
12.	Nuclear Engineering Department NTUA	Greece
13.	NCSR Demokritos	Greece
14.	teleDOS	Greece
15.	HCMR Hellenic Centre for Marine Research	Greece
16.	National Public Health Center Department for Radiobiology and Radiohygiene	Hungary
17.	Ministry of Health, Radiation Protection Centre	Lithuania
18.	Center for Ecotoxicological Research Podgorica Radiation Protection and Noise Measurement Unit	Montenegro
19.	Institute of Public Health of Republic of Macedonia	North Macedonia
20.	Institute of Nuclear Chemistry and Technology	Poland
21.	Departamento de Ciencias da Terra	Portugal

	Laboratory Name	Member State
22.	Institute for Nuclear Research - Radiation Protection, Environmental Protection and Civil Protection Laboratory	Romania
23.	State Research Center – Burnasyan Federal Medical Biophysical Center of Federal Medical Biological Agency (SRC - FMBC)	Russian Federation
24.	Institute of Nuclear Sciences “Vinča”	Serbia
25.	Public Health Authority	Slovakia
26.	Regional Authority of Public Health in Banská Bystrica	Slovakia
27.	VUJE Trnava	Slovakia
28.	Turkish Energy, Nuclear and Mineral Research Agency (TENMAK)	Türkiye