



IAEA

原子用于和平与发展

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

Organismo Internacional de Energía Atómica

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国际原子能机构（原子能机构）秘书处向原子能机构各成员国致意，并荣幸地提请注意将于 **2025 年 11 月 4 日至 7 日** 在比利时布鲁塞尔举行的**低地震活动区核装置场址的地震危害评定国际讲习班**（以下称“活动”）。

这次活动的目的是收集对低地震活动区核装置场址进行地震危害评定方面的最新经验和良好实践。将讨论近期核项目在开发震源和地动特征模型方面的挑战，并辅以实际操作实践活动和主旨演讲。

这次活动将使用英文。

请各成员国指派一名或几名参加者参加这次活动。大力鼓励各成员国确定女性参加者。

原子能机构一般不承担参加者参加活动的差旅费和其他费用。但原子能机构可支配有限资金，用于帮助支付某些参加者的参加费用。根据具体申请通常可向每个国家的一名参加者提供此种援助，条件是原子能机构认为该参加者将为这次活动做出重要贡献。如随附“资料单”所示，应不迟于 **2025 年 7 月 31 日** 通过 InTouch+平台提交财政支助的申请。

应注意，原子能机构对个人财产遭受的任何损坏或损失概不赔偿。原子能机构也不向原子能机构活动的参加者提供健康保险。因此，个人应做私人保险安排。但是，原子能机构将就明显因为原子能机构工作而引起的事故和疾病提供保险。

如随附“资料单”所示，应不迟于 **2025 年 7 月 31 日** 通过国家主管当局（外交部、常驻原子能机构代表团或国家原子能机构）在 InTouch+平台（<https://intouchplus.iaea.org>）上将指派名单提交原子能机构。

一俟收到正式指派名单，这次活动的科学秘书将酌情就进一步的安排（包括差旅详情）与参加者直接联系。

此外，若各国政府还希望指派一名或多名观察员协助所指派的参加者并向其提供咨询意见，则诚请在上述日期之前将任何此类观察员的姓名和详细联系方式通知原子能机构。根据既定规则，希望各国政府承担其可能派出参加原子能机构活动的任何观察员的参加费用。原子能机构对观察员个人财产遭受的任何损坏或损失，或在其前往参加原子能机构活动的旅途中发生的或与参加原子能机构活动有关的疾病、伤害或死亡概不赔偿。

国际原子能机构秘书处借此机会再次向原子能机构各成员国致以最崇高的敬意。



2025 年 3 月 12 日

附件（仅以英文印发）：资料单



International Workshop on Seismic Hazard Assessment of Nuclear Installation Sites in Low Seismicity Regions

**Hosted by the
Government of Belgium**

through
Tractebel Engineering

Brussels, Belgium

4–7 November 2025

Ref. No.: EVT2406892

Information Sheet

Introduction

In order to ensure the seismic safety of nuclear installations, their structures, systems, and components are designed to withstand vibratory ground motions expected to occur at their sites during the life cycle of these facilities. IAEA Safety Standards Series No. SSG-9 (Rev. 1), “Seismic Hazards in Site Evaluation for Nuclear Installations” provides the recommendations in relation to the evaluation of vibratory ground motion hazards, based on the seismic hazard assessment of the nuclear installation site. Successful completion of seismic hazard assessment projects with proper implementation of the recommendations given in SSG-9 (Rev. 1) may be challenging in low seismicity regions, due to lack of seismotectonic data. These challenges include:

- Developing seismic source zonation models in the lack of well-studied seismogenic structures with recent tectonic activity;
- Achieving statistically stable estimates of magnitude recurrence model parameters due to limited number earthquakes in the project catalogue;
- Representing the center, body and range of technically defensible interpretations in the logic tree for important source parameters such as maximum magnitude associated with the diffused seismicity sources;
- Selecting ground motion models and assigning weights to alternative models in the logic tree, due to the limited availability of ground motion models for low seismicity regions;
- Difficulties in adjusting ground motion models for the host region as only a few empirical recordings may be available within the site region;
- Treating the epistemic uncertainties due to large variabilities in models, interpretations and parameters.

These challenges will be more pronounced as small modular reactors (SMRs) and microreactors are being considered in an increasing pace by Member States, particularly in low seismicity regions. Complications in estimating the seismic hazards at low frequencies of exceedances that are needed for probabilistic safety analysis without the support of well-established seismotectonic datasets may lead to large conservatism often applied to design. Recent seismic hazard assessment projects for site evaluations or periodic safety reviews of nuclear installations located in such regions provide valuable experience for all Member States. Sharing and discussing good practices, challenges and lessons-learned from seismic hazard assessment projects in low seismicity regions will offer the opportunity for a better understanding of seismic hazards for new and existing nuclear installations.

In order to support the Member States in seismic hazard assessment of nuclear installations, a series of informational documents have been prepared by the IAEA. A recent TECDOC entitled “*Non-Ergodicity of Ground Motion Models for Site Specific Seismic Hazard Assessment at Nuclear Installation Sites*” provides guidance in developing ground motion characterization logic trees where no or limited strong ground motion data is available. A new Safety Report on “*Evaluation of Epistemic Uncertainty in Seismic Hazard Assessment for Nuclear Installations*” describes a well-structured and objective framework for dealing with the epistemic uncertainties in the seismic hazard assessment projects in low and high seismicity regions. With this event, the Member States will also be able to recognize and discuss the support provided by the new informational documents, particularly on the challenging issues in low seismicity areas.

Objectives

The objectives of the international workshop are: (i) to share and discuss the recent experience and challenges from seismic hazard assessment projects in low seismicity regions, (ii) to present the overall outline of a viable process to carry out the seismic hazard assessment for nuclear installation sites by appropriately considering all data and models and their epistemic uncertainties, (iii) to introduce the novel approaches in the ground motion characterization for areas with limited number of recorded strong ground motions, (iv) provide the participants necessary tools and hands-on-experience to implement these new methodologies in site evaluation of nuclear installations, and (iv) provide guidance on seismic monitoring systems, their deployment and their use in low seismicity regions.

Target Audience

The event is targeted at experts from regulatory bodies, utilities, technical support organizations, vendors and research and development organizations, who are working in the areas covered by the workshop.

The event is open to all experts from Member States that are involved or interested in the assessment of the seismic hazards for nuclear installation safety in low seismicity regions. The keynote lectures will be supported by hands-on examples, especially for young professionals from embarking countries who may need some practical guidance to implement the state-of-the-practice.

Professionals specialized in earthquake engineering, seismology, geology, geophysics, seismic hazard, and safety assessment in nuclear regulatory bodies, utilities, technical support organizations, vendors, research and development organizations and other relevant stakeholders are encouraged to apply.

Topics

The workshop will be focused on the state-of-the-practice on probabilistic seismic hazard assessment, ground motion models, seismic source characterization, and evaluation of epistemic uncertainties. The main topical areas to be covered during the workshop are:

- Collection and use of observational data (empirical ground motions, macro-seismic intensity, etc.) and compilation of the site-specific geological, geophysical, and seismological datasets in low seismicity regions for seismic hazard assessment.
- Development of seismic source characterization models with limited seismotectonic data.
- Ground motion characterization using ergodic and non-ergodic ground motion models in low seismicity regions, for national seismic hazard maps, nuclear installation projects or other critical infrastructure.
- Performing physics-based ground motion simulations in low seismicity regions. Incorporation of simulation results in seismic hazard assessment.
- Seismic hazard assessment project development for new and existing sites for site evaluations and periodic safety review.
- Evaluation of epistemic uncertainties in seismic hazard assessment projects and expert elicitation.
- Deployment of the seismic monitoring systems at nuclear installation sites located in low seismicity regions. Differences in system requirements compared to high seismicity regions.
- Use of the data from seismic monitoring systems in non-ergodic ground motion models and site response analysis.

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 or invited organization, participants are requested to submit their application via the InTouch+ platform (<https://intouchplus.iaea.org>) to the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) or organization for onward transmission to the IAEA by **31 July 2025**, following the registration procedure in InTouch+:

1. Access the InTouch+ platform (<https://intouchplus.iaea.org>):
 - Persons with an existing NUCLEUS account can sign in to the platform with their username and password;
 - Persons without an existing NUCLEUS account can register [here](#).
2. Once signed in, prospective participants can use the InTouch+ platform to:
 - Complete or update their personal details under ‘Complete Profile’ and upload the relevant supporting documents;
 - Search for the relevant event under the ‘My Eligible Events’ tab;
 - Select the Member State or invited organization they want to represent from the drop-down menu entitled ‘Designating Authority’ (if an invited organization is not listed, please contact InTouchPlus.Contact-Point@iaea.org);
 - If applicable, indicate whether financial support is requested and complete the relevant information (this is not applicable to participants from invited organizations);
 - Based on the data input, the InTouch+ platform will automatically generate the Participation Form (Form A) and/or the Grant Application Form (Form C);
 - Submit their application.

Once submitted through the InTouch+ platform, the application, together with the auto-generated form(s), will be transmitted automatically to the required authority for approval. If approved, the application, together with the applicable form(s), will automatically be sent to the IAEA through the online platform.

NOTE: The application for financial support should be made, together with the submission of the application, by **31 July 2025**.

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

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

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. The IAEA may also use the contact details of Applicants to inform them of the IAEA’s scientific and technical publications, or the latest employment opportunities and current open vacancies at the IAEA.

These secondary purposes are consistent with the IAEA's mandate. Further information can be found in the [Data Processing Notice](#) concerning the IAEA InTouch+ platform.

Papers and Presentations

The IAEA encourages participants to give presentations on the work of their respective institutions that falls under the topics listed in above Topics Section.

Expenditures and Grants

No registration fee is charged to 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, together with the submission of the application, by **31 July 2025**.

Venue

The event will be held in Brussels, Belgium. Participants must make their own travel and accommodation arrangements. Participants are advised to arrive at the venue one hour before the start of the event on the first day in order to allow for timely registration.

Visas

Participants who require a visa to enter the Kingdom of Belgium should submit the necessary application as soon as possible to the nearest diplomatic or consular representative of the Kingdom of Belgium.

Organization

Scientific Secretary

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



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Atoms for Peace and Development

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In reply please refer to: **EVT2406892**

Dial directly to extension: (+43 1) 2600-

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 **International Workshop on Seismic Hazard Assessment of Nuclear Installation Sites in Low Seismicity Regions** (hereinafter referred to as "event") to be held in Brussels, Belgium, from **4 to 7 November 2025**.

The purpose of the event is to gather recent experiences and good practices in performing seismic hazard assessment for nuclear installation sites in low seismicity areas. Challenges in developing the seismic source and ground motion characterization models from recent nuclear projects will be discussed, supported by hands-on practical sessions and keynote lectures.

The event will be held in English.

Member States are invited to designate one or more participants for this event. Member States are strongly encouraged to identify 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 via the InTouch+ platform not later than **31 July 2025**, as indicated in the enclosed Information Sheet.

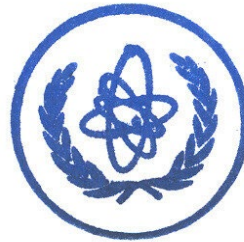
It should be noted that compensation is not payable by the IAEA for any damage to or loss of personal property. The IAEA also does not provide health insurance coverage for participants in IAEA events. Arrangements for private insurance coverage on an individual basis should therefore be made. The IAEA 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 via the InTouch+ platform (<https://intouchplus.iaea.org>) through the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) not later than **31 July 2025**, as indicated in the enclosed Information Sheet.

The Scientific Secretary of the event will liaise with the participants directly concerning further arrangements, including travel details, as appropriate, once the 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 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.



2025-03-12

Enclosure: Information Sheet