

3rd Call for Proposals

GEOLAB is a community of Research Infrastructures (RI) for environmental and geotechnical research funded by the Horizon 2020 Research and Innovation programme. Infrastructure, in the sense used in this document, is a facility or set of facilities at one of the participating members of the GEOLAB network, in which experimental environmental and geotechnical research can be performed.

The GEOLAB RI consists of 11 unique installations in Europe aimed to study subsurface behaviour and the interaction with structural CI elements (e.g. a bridge) and the environment. The overarching aim of GEOLAB is to integrate and advance these key national research infrastructures towards a one-stop-shop of excellent facilities for performing ground-breaking research and innovation to address the challenges faced by the CI of Europe.

Access to these 11 experimental facilities will be provided to potential users to perform ground-breaking research and innovation using the beyond state-of-the-art advances of GEOLAB capabilities.

The facilities are based at the following institutes: Deltares, TUDelft, ETHZ, University of Maribor / Zavod Za Gradbenistvo Slovenije, TU Darmstadt, NGI, CEDEX, Uni Eiffel and University of Cambridge. They are designed for research across a range of disciplines, including geotechnics, soil mechanics, subsurface behaviour, and the interaction with structural CI elements, aging of critical infrastructure, climate change, extreme weather and geo-hazards (landslides, land subsidence, etc.). More information on the facilities is available on project-geolab.eu/facilities-in-project-geolab/. Via this website access can be obtained to the GEOLAB knowledge platform. The knowledge platform provides detailed information on the research facilities, including a user manual and video tutorials. Also, a report on the topic "Physical modelling of the impact of climate change, extreme events and aging on CI" is available.

This Call for Proposals is an invitation to all eligible research groups (see the summary of rules and conditions for transnational access) to submit a proposal for an experiment to be hosted in one of the abovementioned facilities, free of charge. The theme of the present call is '*Experiments to validate advances in numerical modelling and data science leading to a better engineering design*'.

To guide prospective users in preparing their proposal, further details on the capabilities of physical modelling at the experimental facilities can be found [here](#). We ask prospective Users of the facilities to make clear in their proposal how their research will contribute to our knowledge and understanding of enhancing the resilience of the CI in Europe.

The programme provides User Groups access *free of charge* to the facilities for their research project and covers travel and subsistence costs (within prescribed limits) as well. Access is made available for projects, in general not exceeding 1 month. State-of-the-art measuring instruments, data-acquisition and processing systems will be available, as well as modern support facilities, such as library, computers, and internet access. Furthermore, visiting researchers are offered a scientific and intellectual environment, with assistance and guidance from experts at the host institute.

User groups are only eligible when the team leader and the majority of researchers come from the EU or Associated States, but outside the country of the host country facility. Details on the conditions for eligibility are in the summary of rules and conditions.

Project proposal should be submitted by email to the provider of the facility you would like to use for your proposed experiment. A valid proposal should include the following items in one file:

1. **(A01)** A proposal, written in the provided template (separate document), not exceeding 8 pages (incl. text, tables and figures), with the following content:
 - a. Scientific context of the study
 - b. Explanation of how the research contributes to enhancing the resilience of CI in Europe
 - c. Scientific need to use this specific installation

- d. Experimental set-up including the detailed layout, scaling (if relevant), instrumentation type and locations, type of container, type(s) of soil materials, estimated duration of test, additional technical details and specifications to aid the facility providers in assessing the project's feasibility
- e. Time plan for the planned experiments (preparation and testing duration)
- f. Data management and Publication Plan
- g. Detailed mention of the team members, indicating the female and early stage researchers in the group, along with the corresponding percentages.

2. **(A02)** CVs for each researcher (not exceeding 1 page per researcher).

Please note that proposals exceeding the above page limits and lacking any of the prescribed sections cannot be considered by the User Selection Panel.

The deadline for proposals is on **September 30th, 2023, 23:59 CET**. Proposals received after this time cannot be considered. Proposals are reviewed by a User Selection Panel, the outcome of which is expected to be known on **January 15th, 2024**.

The primary criterion for selection is the scientific merit. The secondary criteria are the potential of the experiments to enhance the resilience of Europe's Critical Infrastructure and the experience of the User Group. To encourage gender balance, female participation will have a significant weight in the selection process, as well as the involvement of Early Stage Researchers and non-academic (CI network managers and/or private sector) participants. The prospective users are strongly encouraged to contact the Infrastructure of interest during the preparation of the proposal in order to ensure that the proposal is in alignment with the available capabilities of and equipment in the facilities. It is highly recommended to send a draft proposal to the infrastructure manager as early as possible, ideally not less than 3 weeks before the deadline. By doing so, the facility manager can advise the prospective Users with respect to technical constraints, feasibility or eligibility conditions and provide additional information aimed at improving the proposal.

For more information, please contact the representatives of the GEOLAB installations, as presented in Table 1.

Table 1 Contact details of installation representatives.

Installation	Location	Name of Representative	Telephone	Email
Deltares	Delft, The Netherlands	Suzanne van Eekelen	+31 88 335 7287	Suzanne.vanEekelen@deltares.nl
TU Delft	Delft, The Netherlands	Miguel Cabrera	+31 15 27 83663	M.A.Cabrera@tudelft.nl
ETH Zurich	Zurich, Switzerland	Evangelia (Eva) Korre	+41 44 633 3410	eva.korre@igt.baug.ethz.ch
U Maribor	Maribor, Slovenia	Stanislav Lenart	+386 31 347 826	stanislav.lenart@zag.si
TU Darmstadt	Darmstadt, Germany	Hauke Zachert	+49 6151 16-22811	hauke.zachert@tu-darmstadt.de
NGI	Oslo, Norway	Thi Minh Hue Le	+47 93 001 834	thi.le@ngi.no
CEDEX	Madrid, Spain	Maria Santana	+34 91 335 7344	Maria.S.Ruiz@cedex.es
Uni Eiffel	Bouguenais, France	Matthieu Blanc	+33 24 084 5818	matthieu.blanc@univ-eiffel.fr
U Cambridge	Cambridge, United Kingdom	Giulia Viggiani	+44 12 233 32713	gv278@cam.ac.uk