

INTEGRATED EUROPEAN LONG-TERM ECOSYSTEM & SOCIO- ECOLOGICAL RESEARCH INFRASTRUCTURE



**A FOUR YEAR PROJECT TO FURTHER DEVELOP
THE LONG-TERM ECOSYSTEM RESEARCH (LTER)
INFRASTRUCTURE AND COMMUNITY IN EUROPE**

We live in world of rapid social, economic and environmental change, facing major environmental issues such as global warming, biodiversity loss and unsustainable pressure on natural resources. To address these problems requires world-class ecosystem research by a well-connected, extensive community of experts, supported by advanced sites and facilities, openly shared, easily accessible data and capacity building programmes. This is the goal of European LTER. eLTER H2020 is a flagship project to make this a reality.

KEY COMPONENTS OF eLTER H2020:

- Four scientific use cases with increasing level of complexity to assess LTER data quality and services
- IT architecture and tool development alongside the use cases
- Detailed specification of eLTER research infrastructure design
- Integrated access to data from ≈160 selected LTER sites & Critical Zone Observatories (Virtual Access)
- Supported access to 18 top ecosystem research sites (Transnational Access)
- Research infrastructure integration at national, European and global scales.

RELATED EUROPEAN LTER ACTIVITIES

eLTER H2020 will closely interact with two other major elements:

- **eLTER ESFRI process** to formally develop the eLTER research infrastructure under the framework of the *European Strategy Forum on Research Infrastructures*
- **LTER-Europe**, bringing together 25 national networks operating 400 research sites and 35 socio-ecological research platforms.



WORK PACKAGES

- 1 Synthesis of grand societal and research challenges relevant for ecosystem Research Infrastructure development
- 2 Towards a Fully Integrated, Interoperable Ecosystem Research Infrastructure Pool Requirements and conceptual framework for data integration and the eLTER data infrastructure
- 3 Technological Innovation and Parameter Harmonization
- 4 Stakeholder interaction & communication
- 5 Mobility, training and building the culture of access to infrastructures
- 6 Transnational Access Supervision
- 7 Central IT Service Components
- 8 Improving and testing integrated information services for abiotic drivers and ecosystem/biodiversity response
- 9 Audit and enhancement of LTER Platform services for problem-solving research in socio-ecological systems
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PARTNERS

- Environment Agency Austria
- Finnish Environment Institute
- National Center for Scientific Research, France
- Jülich Research Centre, Germany
- Helmholtz Centre for Environmental Research, Germany
- Technical University of Crete, Greece
- National Research Council, Italy
- European Regional Centre for Ecohydrology of the Polish Academy of Sciences
- BIOSENSE Institute, University of Novi Sad, Serbia
- Swedish University of Agricultural Sciences
- NERC Centre for Ecology & Hydrology
- Flemish Government Research Institute for Nature and Forest
- Institute of Biodiversity and Ecosystem Research at the Bulgarian Academy of Sciences
- GISAT S.R.O., Czech Republic
- University of Helsinki, Finland
- MASINOTEK Oy, Finland
- Senckenberg Nature Research Society, Germany
- Centre for Ecological Research of the Hungarian Academy of Sciences
- Ben-Gurion University of the Negev, Israel
- Biology Institute of the University of Latvia
- University of Groningen, Netherlands
- Foundation of the Science Faculty of the University of Lisbon, Portugal
- University of Bucharest, Romania
- Institute of Landscape Ecology of the Slovak Academy of Sciences
- Research Centre of the Slovenian Academy of Sciences and Arts
- University of Granada, Spain
- Spanish National Research Council