

## eLTER RI: THE PLANNED DESIGN

eLTER RI will consist of **Central Services** components and **National Research Infrastructures** providing services like access to data and sites for various user groups and research communities. The design of eLTER RI will be finalised during the Preparatory Phase Project.

### CONTACT



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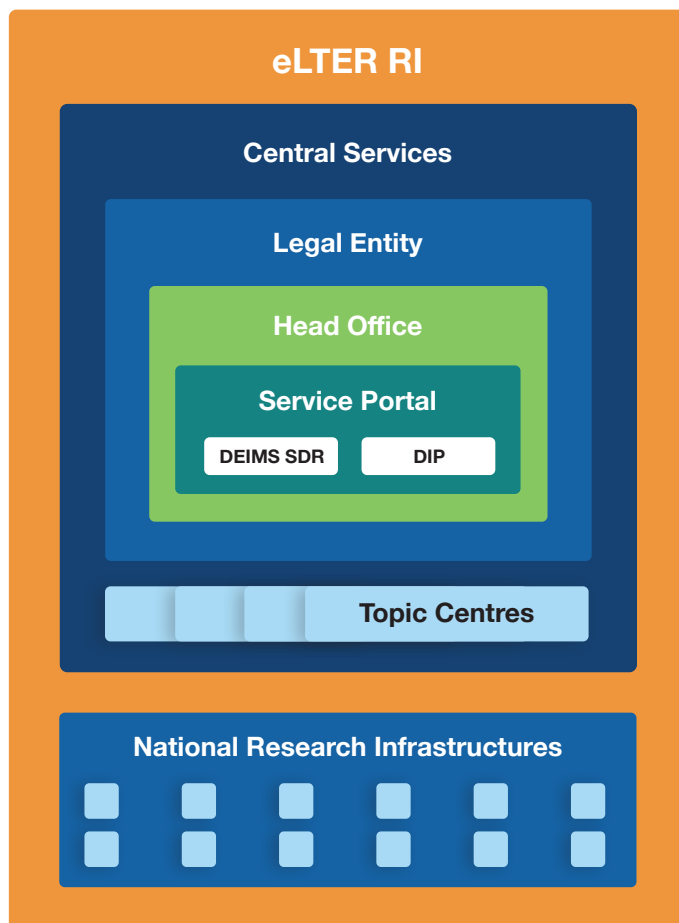
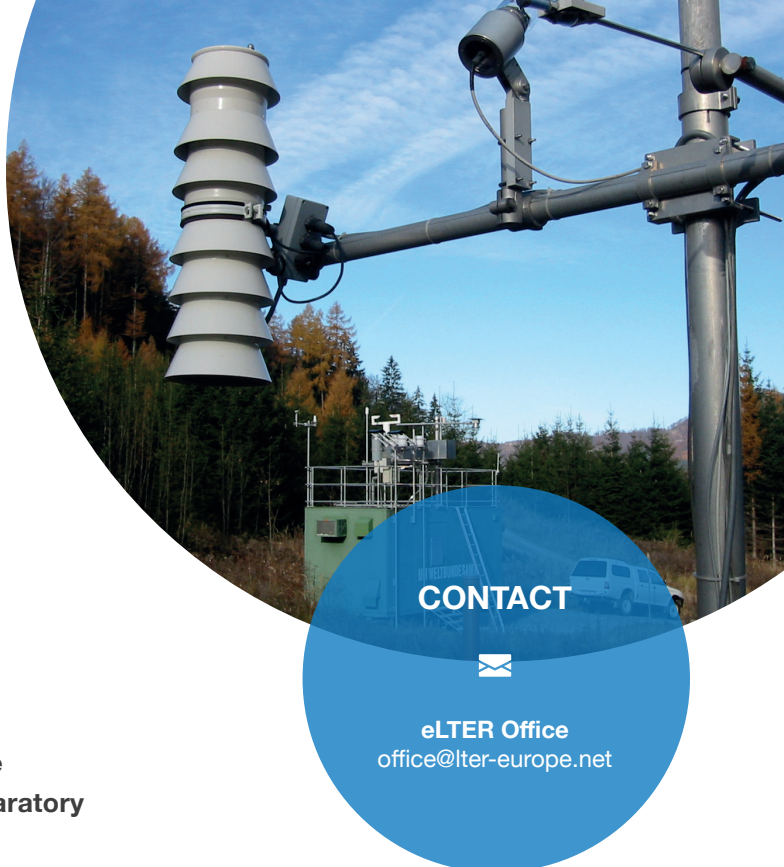
eLTER RI<sup>16</sup> will be a distributed Research Infrastructure consisting of Central Services and multiple eLTER Sites and Platforms in participating European countries. The design is planned to serve and benefit different user groups and will evolve in close collaboration with participant countries.

### Central Services

Central Services (CSs) will comprise the Head Office (HO), Service Portal (SP) and Topical Service Areas (TSAs), which reflect topics to be tackled by as yet unspecified Topic Centres (TCs). CSs also include underlying IT services. They will secure both the actual operation of eLTER RI (serving internal stakeholders in accomplishing their tasks) and the provisioning of eLTER RI services to external users. They will concern virtual access to data, analytical services, centralised organisation of physical and remote access, training and capacity building, services to researchers and other users, notably the private sector, and co-designing of new services. CSs will facilitate international collaboration by championing the RI in global fora, and promote the operation of harmonised policies and procedures throughout the eLTER RI and with partner RIs.

**Topical Service Areas (TSAs)**, cluster key service requirements for internal and external stakeholders. The following four TSAs have been specified:

**TSa1:** Services securing proper basic operation covering a wide range of quality assurance and quality



control procedures. Also covers eLTER standards and interoperability issues at the European level.

**TSA2:** Analysis and modelling tool kits and a community modelling platform for different user groups such as ecosystem and socio-ecological system researchers, and in support of cross-disciplinary research.

**TSA3:** Research outreach and interfaces fostering transdisciplinary research approaches, co-design, enhancement of the eLTER Information Clusters from multiple sources, and synthesis services to benefit both external and internal stakeholders.

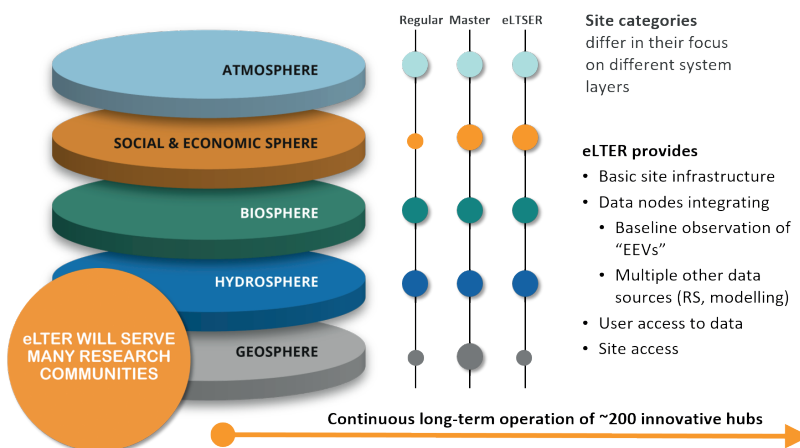
**TSA4:** Services for innovation in sensor development and data analysis technologies (e.g. through private sector partnerships) with eLTER RI as a testbed and benefitting from advanced technologies and methods.

## National Research Infrastructures (NRIs)

These are the national building blocks of the eLTER RI, consisting of in situ facilities, eLTER Sites and eLTSER Platforms, owned by Research Performing Organisations and participating in eLTER RI by providing access and standardised measurements for research. NRIs are coordinated at the country level by National Coordinators. The current planning envisages 120 eLTER Regular Sites, 60 eLTER Master Sites and 45 eLTSER Platforms.

**eLTER Regular Sites:** Sites covering major ecosystem processes to allow analyses and assessments of overall ecosystem functioning with less intensive instrumentation (the level of equipment required also depending on the ecosystem type and specific ecological profile of the site). Regular sites complement Master Sites in order to achieve appropriate spatial and geopolitical coverage.

**eLTER Master Sites:** Fully instrumented Sites as focal points for instrument-intensive research, ideally suited for co-location with e.g. small scale experiments, specialised monitoring programmes or other RIs.



**eLTSER Platforms:** Regional multi- and transdisciplinary case study areas comprising multiple, spatially nested smaller scale elements.

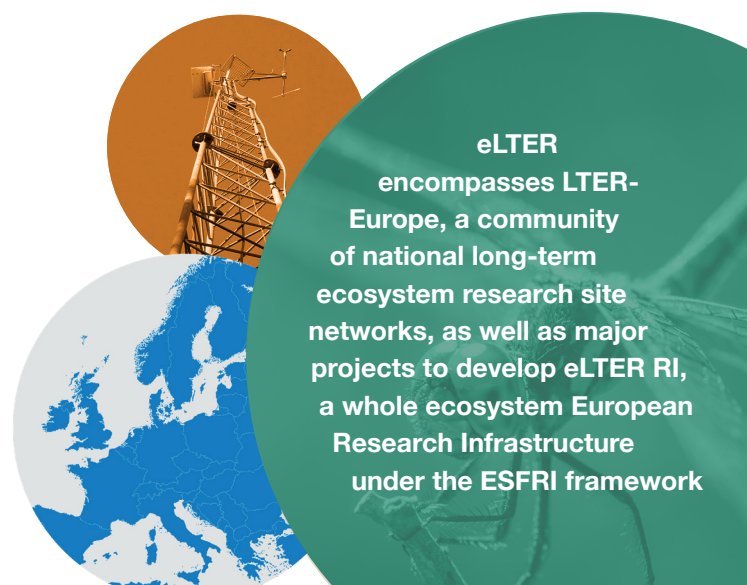
## Services

### Access to eLTER sites

**Access to data, data products, models and analysis tools** eLTER Standard Observations and the basic long-term operation of eLTER in situ facilities, servicing a wide range of hypothesis-driven, cross-disciplinary research. eLTER Standard Observations comprise data gathered in situ at eLTER facilities, and also data from a wide range of other sources (e.g. national censuses, remote sensing), made easily available for each eLTER facility ("eLTER Information Cluster") through the eLTER Data Integration Platform (DIP).

**The eLTER Data Infrastructure** is designed to support the NRIs, TCs, Head Office and Service Portal, providing computing capacity, managing the eLTER RI data archives, and support agreed data management protocols.

**eLTER education and training programmes** for RI managers, operators and service providers, researchers, other data users and students.



## Integrated European Long-Term Ecosystem, critical zone and socio-economical systems Research

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