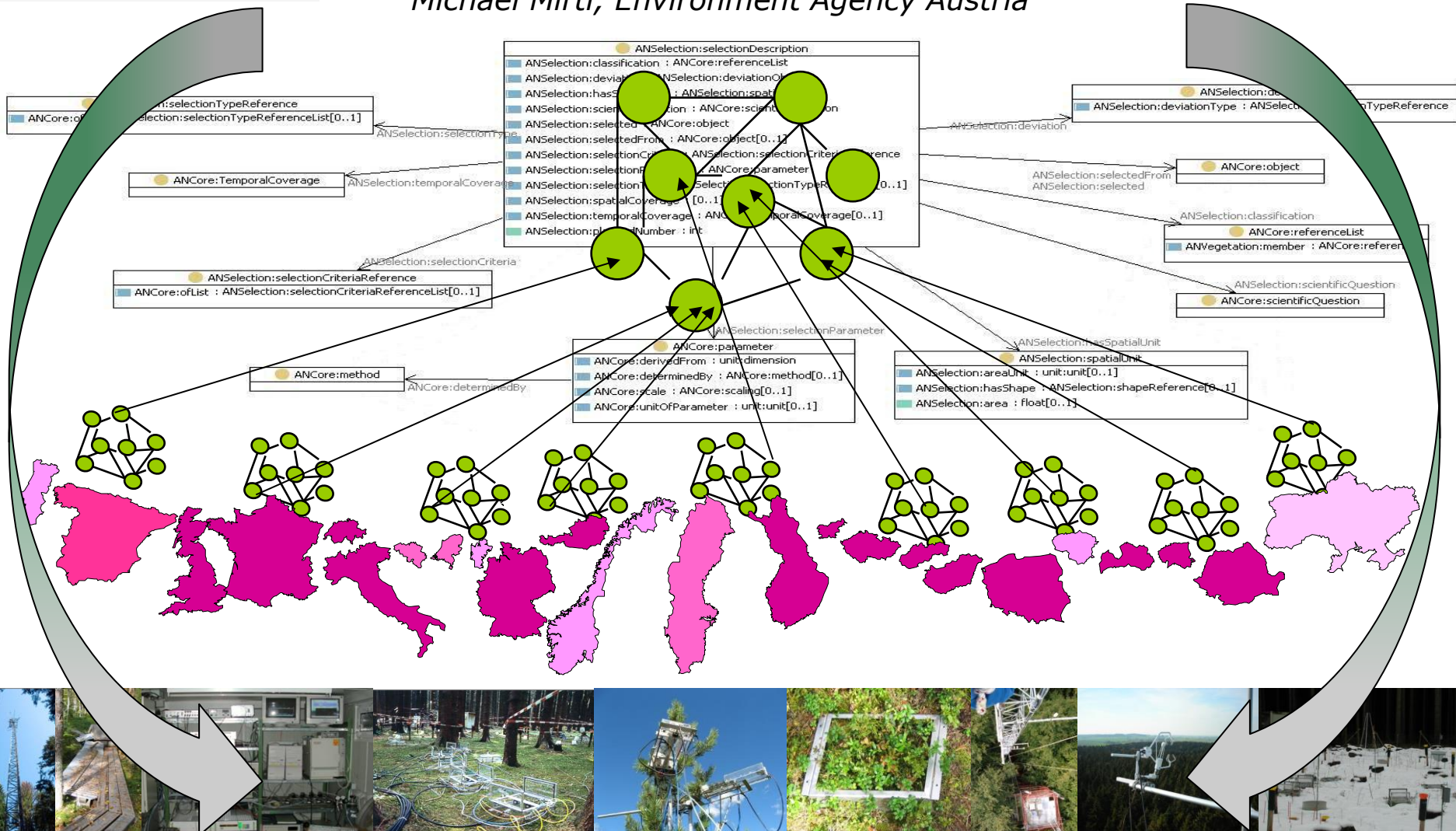
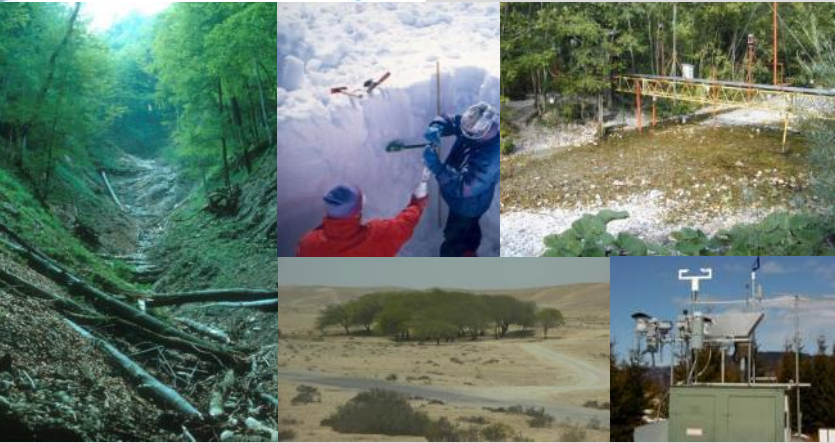


*EUBON Stakeholder Roundtable, Granada, 10th/11th
December 2015
Michael Mirtl, Environment Agency Austria*



The European Long-term Ecosystem Research Network



Knowledge base:

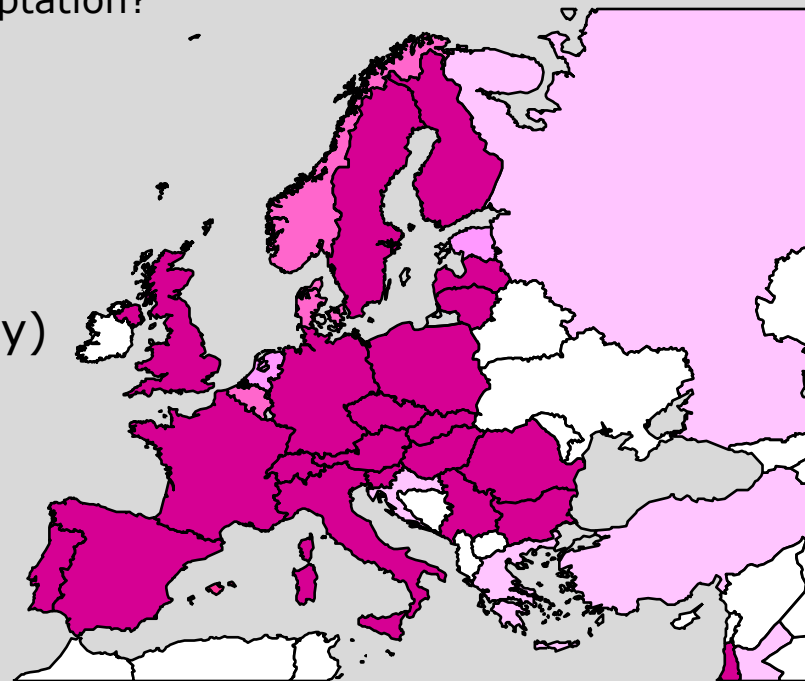
- What drives the major European ecosystems and socio-ecological systems?
- How do changes affect ecosystem functions, biodiversity and ecosystem services?

Information of policy and management:

- How can Ecosystem Services be sustainably secured?
- What are best options for mitigation and adaptation?

- A Network of ~ **400 LTER Sites**
- A Network of ~ **35 LTSER Platforms**
- A Network of **metadata and data**
- A Network of **25 national networks**
- Part of a Network of **European Networks**
(ALTER-Net, EXPEER, LifeWatch)
- A Network of ~ **100 institutions**
- A Network of ~ **1000 scientists** (community)
- A Network of **disciplines**
- A Network of **site based research teams**
- A **knowledge** factory
- ... and a **structuring process**

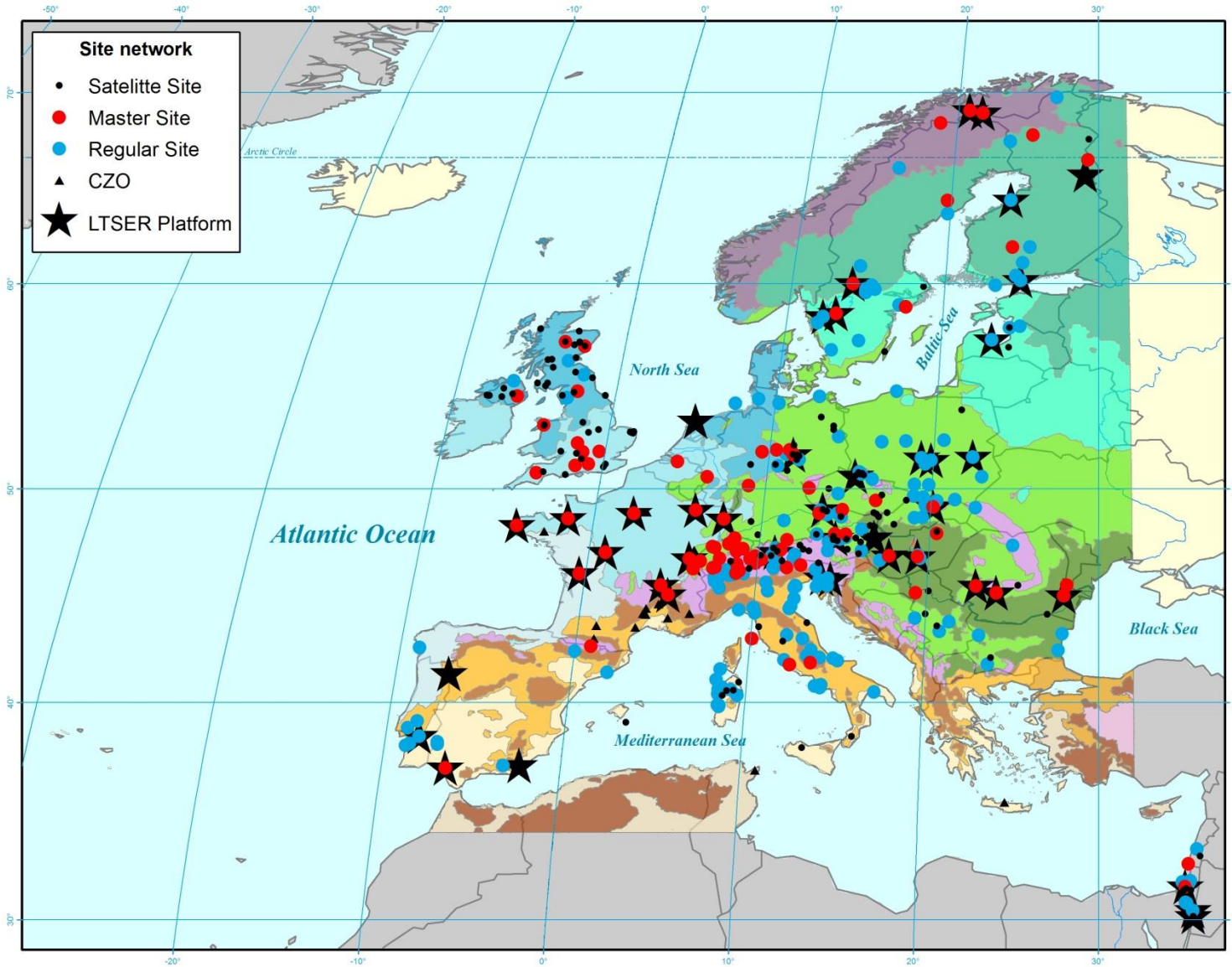
www.lter-europe.net



The conceptual pillars of LTER

- **Long-term:** dedicated to the long-term AND continuous collection, documentation, provisioning and use of long-term data on ecosystems with a time horizon of decades to centuries (covering the aspect of natural capital for sustainable development)
- **In-situ:** data generation at different spatial scales across ecosystem compartments of individual in-natura sites, European environmental zones and socio-ecological regions
- **Process orientation:** aims at identifying, quantifying and studying the interactions (→ patterns) of ecosystem processes affected by internal and external drivers. As for socio-ecological systems the process orientation implies processes related to ecosystem services and their use.
- **System approach:** interactions of abiotic and biotic components at different scales in a given system
- **Wide-scale ?systematic? coverage** of major terrestrial and aquatic environments

Backbone ecosystem research infrastructure across Europe



A European fleet for terrestrial long-term ecosystem and biodiversity research [\rightarrow „eLTER Eurofleet“]

- Generic research infrastructure offering basic services and baseline activities
- Harmonized action of formerly less coordinated elements, enabling new research qualities
- Central steering PLUS adaptive manouvers of individual elements
- Mid- and long-term planning in close interactions with strategic processes & other RIs



Ships/ Fleet:

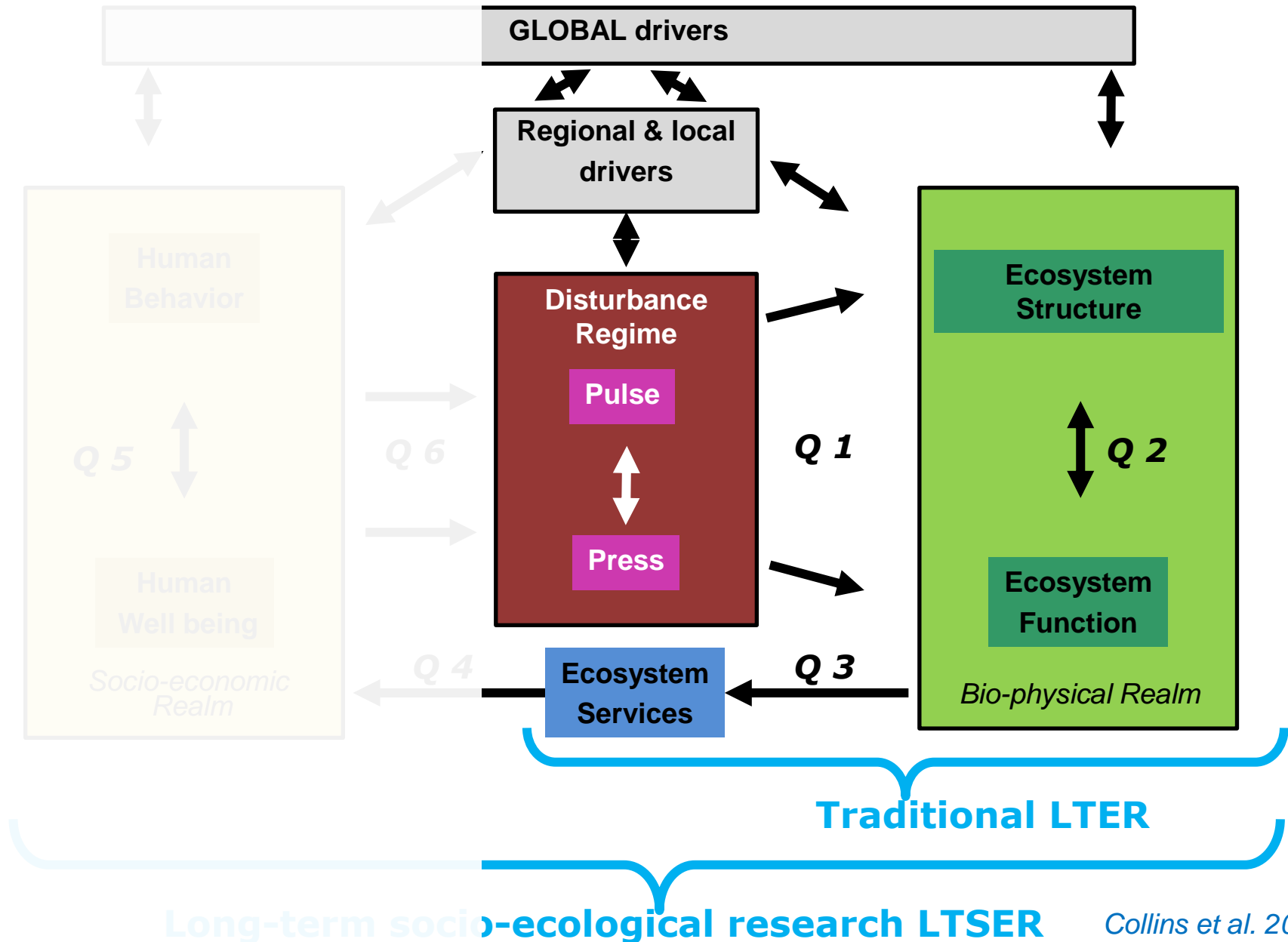
- Fuel containers, engines
- Access to open sea points of interest
- Space for instruments/sensors
- Computers & signal transmission for general use
- Space for staff
- Long-term planning and operation
- Can host many specific questions, but there are overarching ones
 - Contributions of open sea to C-balance and interactions with climate
 - Ocean current research
 - Sustainable fishery

eLTER Sites

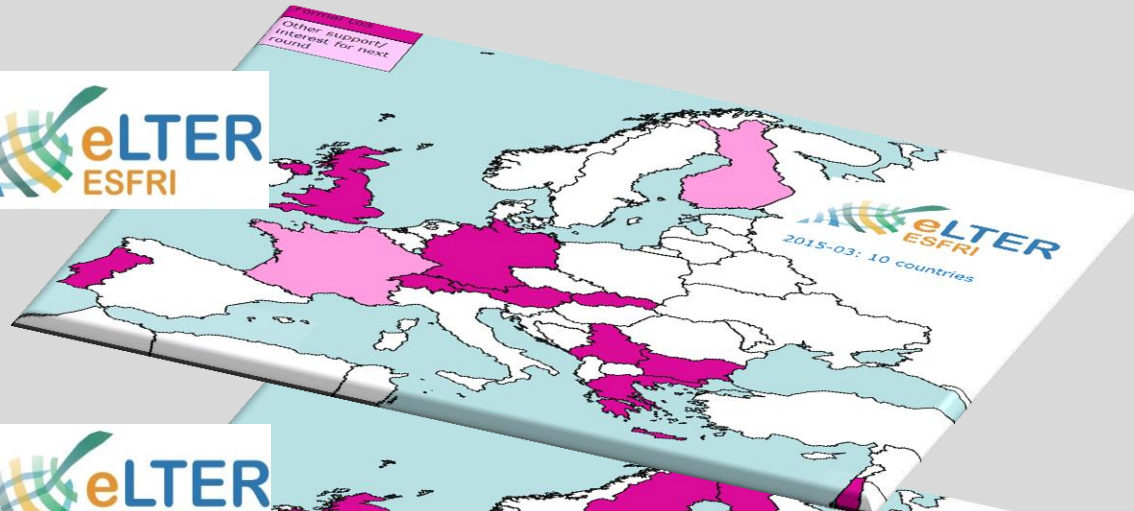
- Power supply
- Access all year under all weather conditions

...and other analogies

Conceptual Framework: Integrated Science for Society and the Environment

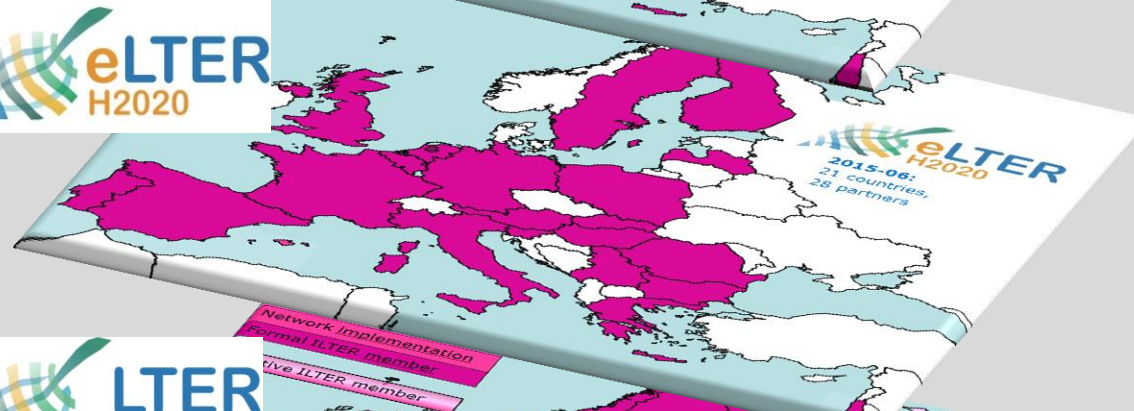


Recruiting eLTER ESFRI from well organized national RI networks



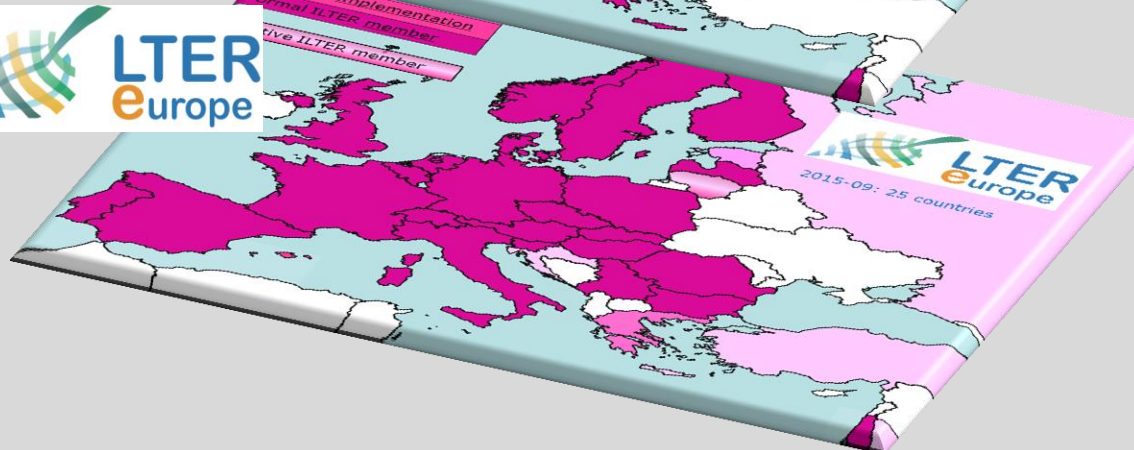
eLTER ESFRI initiative

11 initiating countries
45/80/130 eLTER Sites (MS, RS)
5/10/30 eLTER Platforms



eLTER H2020 Project 2015-2019

21 LTER countries,
28 partners
162 data providing sites




Network of formal national networks

25 countries
400 LTER Sites
35 LTER Platforms

Recruiting

Standards, Formalisation



**If you want to go fast go
alone,
if you want to go far go
together.**

An old African proverb