

Background document for expression of interest for being member of the Swedish LTER network

Background

The purpose of the LTER network is to provide scientists with a functional infrastructure of well-equipped field sites with a focus on long-term monitoring and research. The LTER network also provides access to existing data, and unique possibilities for collaboration with other scientists or teams, nationally as well as internationally, and to create cross-disciplinary synergies. The LTER network of field sites is ideal for urgent studies on new emergent research issues. LTER also has an important task in education and in popular science, disseminating the findings to end users, stakeholders, schools, and a broader public. The monitoring component has an obvious coupling with the current Swedish LifeWatch initiative.

A LTER site is of limited size (0.01-10 km²) and represents one or more habitat types and forms of land use (e.g. forests, agro-pastoral areas, rivers and lakes, or marine environments) at different latitudes and altitudes. Activities are concentrated on biogeochemical processes and selected taxonomic groups. At a larger geographical scale (regional), a LTER site and other adjacent facilities can be merged to form LTSER sites or platforms, where the socio-economic component is accommodated. A LTSER-platform is a modular multifunctional research facility consisting of sub-sites (existing LTER and other facilities) covering different habitats, forms and intensities of land use and scale (local to landscape) and relevant infrastructure such as laboratories and instrumented catchments. The elements represent the main habitats, land use forms and practices relevant for the region (100-10000 km²) and cover scales from local to landscape level. LTSER-platforms are economic and social units, or coincide/overlap, at least partly, with such units, where adequate information on land use history, economy and demography is available. These platforms operate at the scale(s) required to study socio-environmental phenomena and manifest clearly defined problems on the interface between social and environmental dynamics.

More information and background documents can be found on the web site of LTER-Europe at <http://www.lter-europe.net/>, or the Swedish LTER web site, currently (2010) hosted at http://www.ma.slu.se/LTER_Swe.

Member commitments

There are two levels of membership in LTER-Europe; called level 1 and level 2. National networks adopted by the global LTER network ILTER automatically become Level 1 members in LTER-Europe. Criteria for adoption by the ILTER are described in the ILTER Policy Document (<http://www.ilternet.edu/about-ilter/ILTER-bylaws-10-01-2004.pdf>). The policy defines a LTER network as “Network of scientists collectively engaged to conduct scientific research according to the ILTER mission, vision and goals”. The nomination procedure says: “The petition for a Member Network to join the ILTER Network should come from a community of scientists endorsed by a government body, or private entity acting at the national level, and address the LTER program within that Member’s boundaries. Mission statements of the LTER program should be consistent with the mission of the ILTER Network”. The membership criteria include:

- existence of a national committee or other management structure;
- a set of proposed sites or criteria for selection of sites;

- a statement of collective purpose which might include defined research or monitoring themes;
- a policy commitment to compatibility and accessibility in data management;
- prospects for long-term stability of the program.”

Level 2 members in LTER-Europe are bound to a set of stricter by-laws, and deeper commitment than Level 1 members. The commitments for a level 2 membership include (from LTER-Europe Criteria and Recommendations; Document I20304v02):

1. Participation in the annual LTER-Europe Coordinating Committee meeting
2. Information on national network structure
3. Communication and responsiveness (less than 15 days response time to questions and requests communicated by email to the contact persons nominated according to item 5 in the LTER-Europe criteria and recommendations (document I20304v02))
4. Regular update of information on national LTER facilities (sites, platforms) in the LTER InfoBase (metadata)
5. Nomination of contact persons: One representative and two deputies
6. Organisation of annual national LTER meetings
7. Annual status / progress report of national network to LTER-Europe
8. A data management and accessibility policy including a commitment to begin the process of sharing and exchanging data and knowledge with other members of LTER-Europe.

In addition to the criteria listed above and criteria for level 1 membership, a level 2 membership also includes (from LTER-Bylaws document I3035v06):

- A commitment to supply information about its sites and procedures as may be reasonably requested by the LTER-Europe Committee or its officers.
- A commitment to meet eventual LTER-Europe network criteria as defined by the LTER-Europe Co-ordinating Committee.

The Swedish LTER network

The Swedish network will be built from a bottom-up principle, where individual sites form the basis of the network, and a central secretariat coordinates national activities and contacts with the European and International mother LTER organisations. LTER-Sweden will be governed by the member organisations through an annual meeting with one voting member per LTER site. A management board with members from a selection of the sites should be elected for dealing with upcoming and acute issues. The central secretariat will run daily issues and be responsible for e.g. organising the annual meeting, maintaining the web site, updates and contacts with ILTER, LTER Europe, end users and stake holders.

The working name of the Swedish LTER network is “LTER-Sweden”. The Swedish LTER network is open for both LTER and LTSE sites. Thus, throughout this document the mentioning of Swedish LTER sites also include LTSE sites. The aim of LTER-Sweden is to connect Swedish environmental monitoring and research sites fulfilling the demands for LTER-Europe level 2 membership into a national network for enhancing the capacities for long-term ecological monitoring and research. The network will serve as a basis for enhanced capacity for environmental research and assessment. The collective purposes include the following objectives:

- The network should reinforce Swedish environmental research and assessment by building capacity for data sharing and research cooperation between long-term monitoring and research stations and their associates.
- The network should provide scientists with opportunities for research and environmental assessment at greater spatial and temporal scales than possible with data from one individual monitoring station.
- The network should encourage applications for grants for research and environmental assessment activities not possible to conduct without a functioning Swedish LTER network, and also through an international cooperation, especially with other LTER organisations.
- The network will encourage new research areas and multidisciplinary research emerging from the network structure.

The majority of the sites will have a dominance of terrestrial ecosystems, but wetland, freshwater and marine sites are also welcome. Terrestrial LTER sites are preferably dispersed over a climate gradient to cover the main vegetation regions in Sweden. A priority is to encompass different kinds of land use, among or within sites.

The Swedish LTER network and individual LTER sites should preferably be based on already existing field stations with long-term data sets. A fully functional LTER site needs to have laboratories and lodging facilities in order to host national as well as international research teams and students. To fulfil LTER-Europe obligations, each LTER site should have a standardised climate station, and provide and update a home page with links from the LTER-Sweden web site. All LTER-Sweden member organisations should have a data storing infrastructure to be able to conform to the data sharing policy described in the LTER Europe by-laws.

Swedish LTER sites may be consortia of geographically close monitoring or research sites, if the consortia can show added values of cooperation. However, Swedish LTER sites that are based on a consortium should have at least one field station as specified in the LTER-Europe by-laws. Swedish LTER-sites based on consortia should describe their organisation in Appendix 2 in the application form.

All Swedish LTER sites should be associated with an established organisation, and with a board responsible for the maintenance of the site. Each site should have a contact person or site coordinator with an appointment reaching at least two years. All sites should participate with at least one person at annual LTER-Sweden meetings. Each member organisation should also be prepared to take an active part in the LTER-Sweden management board.

The Swedish application

An initial step is to invite all potential members in LTER-Sweden to express their interest of being members in the Swedish LTER network. In the invitation form (Appendix 1 and 2), potential members are asked to declare how they would fulfil the criteria for LTER sites set up by LTER-Europe. The results of this call will form the basis of the application to ILTER, and further development of the Swedish network.

All interested potential member organisations are encouraged to fill in the application form posted along with this background document. Last date for application is **2010-04-30**.

Next stage in the Swedish LTER process is to form an official network and to apply for membership in ILTER and thereby automatically also becoming Level 1 members of LTER-Europe. The time frame for this is that an application should be ready for the ILTER annual meeting and be due by 31 May 2010.

The following step in the Swedish LTER process is to develop and strengthen the national network to become a level 2 member in LTER-Europe, and thereby strengthen the research capacity emerging from the network, and thus making the network eligible for applying for funding from national and international funding bodies.

Evaluation group

All expressions of interest will be evaluated by an evaluation committee consisting of the following members:

Anna-Maria Jönsson, Lund University, Ulf Molau, Gothenburg University, John Munthe, IVL Ulf Grandin, SLU; Lars Lundin, SLU, and one person from the Swedish Research Council (Vetenskapsrådet).

Road map

Drafting LTER Sweden organisation and implementation document (Dec-09)

Call for applications from potential Swedish LTER sites (Jan-10)

Last date for response on the Call (01 May)

Application to ILTER for membership in LTER Europe (May)

Evaluation of Swedish applications (May)

Site selection (June)

Revised site descriptions, if necessary (June)

Endorsement (hopefully) (ILTER annual meeting August)

Formalising the initial LTER-Sweden structure (sites, secretariat, data archiving etc.) (Sep)

Kick-off meeting (Sep)

Application for Level 2 membership in LTER-Europe (Sep-10)