



Third Call for Participation in the European Sea Level Service (ESEAS)

The European Sea Level Service (ESEAS, see <http://www.eseas.org>) was established for an initial test period of three years at the first ESEAS Governing Board meeting in July 2001. Currently, 21 European countries participate in the ESEAS. Close to 200 tide gauges are committed to the ESEAS as Observing Sites.

This Call for Participation asks for confirmation of existing contributions and submission of proposals for additional or new ESEAS Analysis Centres, ESEAS Supporting Centres, and ESEAS Coordinators. The Call for Participation is based on the Assessment report presented to the ESEAS Governing Board in November 2004 and the following agreement to continue ESEAS beyond the initial period.

This [Per Knudsen] Call is based on international initiatives like the European Unions' Global Monitoring for the Environment and Security (GMES) and the Group on Earth Observation (GEO) and its 10-year Implementation Plan for the Global Earth Observation System of Systems (GEOSS).

This Call is a step in preparing a European contribution to the UN International Early Warning Programme (IEWP).

Proposals submitted under this Call for Participation will be reviewed by the Governing Board of ESEAS.

Deadline for all Proposal submitted under this Call for Participation is

20. September 2005

All proposals should be submitted to
ESEAS Central Bureau
c/o Norwegian Mapping Authority
Geodetic Institute
Serviceboks 15
N-3504 Honefoss
Norway
or by e-mail to eseascb@eseas.org or bente-lilja.bye@statkart.no.

Objectives and Rational:

The major objective of the ESEAS is the enhancement of the exploitation of sea-level and related databases both in scientific and non-scientific applications. In order to achieve this, the ESEAS identifies and promotes user requirements as well as requests and wishes made by the users for specific products. Throughout the period 1997 - 2001 co-ordination of sea-level observation activities in Europe was initiated and done through EOSS. The ESEAS continued the work of EOSS and developed a ESEAS Research Infrastructure partly with the support from the European Commission.

Increasing European integration necessitates growing exchange of sea-level data and sea-level related information across national boundaries in order to solve many practical problems, including for example the development of coastal or off-shore infrastructure, definition of height systems, or mapping the ocean bottom. Many scientific problems, particularly in the field of climate change, require regional databases.

Users of the ESEAS will have standardised access to quality-controlled sea-level data as well as derived products and related information. Even though major improvements have been made concerning the development of European solutions to sea-level observations and access to sea-level data, processing, quality-assurance and access, the remaining diversity still can hamper the full exploitation of the sea-level data.

Participants in the ESEAS will gain from access to European-wide standards as well as the synergy of an internationally coordinated development of procedures for quality-control, product derivation, data access, and distribution to the end users. Contributions to the ESEAS will feedback to the participants through improved access to data and techniques originating in other countries and an improved service to the users not achievable on the basis of national resources alone.

Tasks and anticipated products of the ESEAS

The ESEAS aims to provide quality-assured sea-level and sea-level related information for European waters to a broad range of scientific and non-scientific users. In order to achieve this, the tasks of the fully implemented ESEAS include but will not be limited to

- co-ordination of sea-level observations along European coasts,
- setting of standards for sea-level observations,
- promotion of the analysis of the observations and the production of higher-level data products.

To a large extent, the ESEAS attempts to solve these tasks by creating a virtual network. In particular, the ESEAS has created and continues to develop user-friendly interfaces to databases and stimulate research in order to improve observation and analysis methods.

Some of the products to be made available by the ESEAS will be provided in co-operation with other existing services such as PSMSL, EUREF, or centres specialising in satellite altimetry processing.

Organisation and Implementation

The implementation of the ESEAS is based on international collaboration of governmental and non-governmental organisations operating tide gauges along European coasts or providing sea-level related information originating from other sources such as satellite altimetry, GPS and absolute gravity measurements at tide gauges. All activities of the ESEAS are based on voluntary contributions of the participants and are fully funded by the contributing organisations.

In response to the first Call for Participation issued in December 2000, the members of the Governing Board of the ESEAS were nominated. Moreover, 27 National Centres were proposed together with more than 150 ESEAS Observation Sites. The Central Bureau was established.

By the second Call for Participation, a further step was taken in the implementation of the Service. The call was for an initial test and demonstration phase of up to three years, after which the concept of the ESEAS was positively reviewed and a continuation recommended.

ESEAS is today recognized by the UN/IOC as a regional implementation and densification of GLOSS (Global Sea Level Observing System), the sea level element of GOOS (Global Oceanographic Observing System).

As a participating organisation of GEO (Group on Earth Observation), ESEAS will continue its implementation along the lines set out in the GEOSS 10-year Implementation Plan.

With this third Call for Participation, ESEAS will consolidate the existing structure of close to 200 ESEAS Observing Sites distributed among 36 member organizations. ESEAS will further develop and expand its infrastructure and services in order to meet the need for a multipurpose sea level observation system in Europe.

The ESEAS Governing Board has agreed to continue ESEAS as a “best effort” organization based on the existing Terms of Reference, which are available for download at <http://www.e seas.org>.

Scope of the Call for Participation (+ consolidate, contributions to GMES, GEOSS, IEWP-Europe)

The aim of this Call for Participation is to reconfirm existing and solicit additional and new proposals for ESEAS National Centres, ESEAS Analysis Centres, ESEAS Supporting Centres, and ESEAS Coordinators.

ESEAS Analysis Centres are centres carrying out analysis of tide gauge data, GPS data or absolute gravity observations for ESEAS. ESEAS Supporting Centres are analysis or research centres which may already be associated with other services or organisations, but which intend to support ESEAS with products or expertise resulting from their on-going activities.

Reconfirmation and Call for proposals for Operational Sites, National Centres, Analysis/Support Centres and Coordinators.

Reconfirmation of existing contributions

This Call asks existing member organisations of ESEAS to reconfirm their contributions. Those ESEAS members that have added Observation Sites since the last Call are asked to submit a revised list of all Observation Sites.

Call for proposals for Operational Sites

ESEAS Operational Sites primarily will be tide gauges providing continuous measurements of the sea level relative to a well monitored bench mark on land. The ESEAS observing sites may be used for several different applications as described in the EOSS position paper./ESEAS Classification System. This includes those tide gauges co-located with geodetic techniques such as continuous GPS (CGPS) and episodic absolute gravity measurements.

ESEAS Operational Sites generally will be operated by national authorities, with the data being made available to the ESEAS through a stated commitment. For Operational Sites committed to the ESEAS, operation has to be according to the accepted standards of the ESEAS.

Proposals are being sought for tide gauges being operated according to the criteria specified in the EOSS position paper./ESEAS Classification System. Normally, proposals for ESEAS Operational Sites will be associated with proposals for National Centres.

Proposals for ESEAS Operational Sites must include:

- Cover page with the full address of the proposing institute and the name and function of the authorised person;
- List of tide gauges proposed as ESEAS Operational Sites;
- Site descriptions including a summary of the available infrastructure at each site and a brief statements of operational procedures followed;
- Specification of data availability (sample rates, latency, conditions, quality checks)
- Statement of commitment signed by the authorised person.

Call for proposals for National Centres

ESEAS National Centres are responsible for running the Operational Sites and archiving the data. Considering the current diverse situation in European Countries, a country may have more than one National Centre.

The task of the ESEAS National Centres include

- operation of the tide gauges;
- quality control of data in line with ESEAS standards;
- maintenance of a local archive of the original observations;
- providing access to the data archive.

Proposals are sought from institutions that are willing to provide National Centres to the ESEAS. Normally, proposals for National Centres will be associated with proposals for ESEAS Operational Sites.

Proposals for National Centres must cover:

- Cover page with the full address of the proposing institute and the name and function of the authorised person;
 - List of ESEAS Operational Sites operated by the centre;
 - Indication of resources allocated to the National Centre to carry out ESEAS related tasks;
 - Specification of data access (data policy, mode of access) and existing quality assurance procedures;
- Statement of commitment signed by the authorised person.

Call for proposals for ESEAS Analysis/Supporting Centres

ESEAS Analysis Centres are institutes that carry out routine analyses of sea-level observations or sea-level related observations in an agreed-upon and standardised manner in order to make available quality-assured products to the ESEAS.

The Analysis Centres fall into several categories, namely those for tide-gauge data, CGPS observations from sites co-located with tide gauges, satellite altimetry, absolute gravity, and so on.

Proposals for Analysis Centres may be limited to specific tasks, depending on the available resources and expertise. ESEAS has the long-term aim to promote technology transfer between the institutes participating in ESEAS. Analysis Centres therefore should be prepared to participate in activities aiming at this transfer.

It is the aim of the ESEAS to have all individual analysis procedures carried out at least at two Analysis Centres in order to have independent measures of quality for all products.

ESEAS Supporting Centres may be (1) data centres which store data related to sea level, such as GPS campaigns or CGPS, absolute gravity, or satellite altimetry measurements; they may be integrated in National Centres or maintained by other centres outside the ESEAS, such as the EUREF analysis or data centre; (2) analysis centres integrated in other services or programmes providing products relevant for the ESEAS or (3) research institutes carrying out sea-level related research, which has the potential to improve the quality, quantity and applicability of the products provided by the ESEAS.

Proposals for ESEAS Analysis Centres or ESEAS Supporting Centres must include:

- Cover page with the full address of the proposing institute and the name and function of the authorised person;
- Description of the activity the proposing institute intends to carry out;
- Specification of the products to be made available to the ESEAS. The specification should include information on the product itself, the analysis procedure, data quality, any conditions for availability, and latency of the products;
- If applicable, information on service provided to ESEAS (e.g. research activities, expertise);

Statement of commitment signed by the authorised person.

Call for proposals for the ESEAS Network Coordinator

The ESEAS relies heavily on the National Centres. The coordination between these centres is of crucial importance for the success of the service. It is particularly important for ESEAS regional services connected to an European multi-hazards early warnings systems. The ESEAS Network Coordinator will be responsible for

- coordinating the operation of networks of Observing Sites;
- coordinating the data archiving activities of ESEAS National Centres;
- monitoring the quality of network operation;
- assuring adherence to relevant standards;
- ensuring the accessibility of the data archived in the ESEAS National Centres.

Nomination for the ESEAS Network Coordinator can be submitted by all ESEAS National Centres. The ESEAS Network Coordinator will be elected by the Governing Board from the responses to this solicitation.

Nominations for the ESEAS Network Coordinator must include:

- Cover page with the full address of the nominating institute and the name and function of the authorised person;
- Name, affiliation and position of the nominee;
- Short description of the relevant experience of the nominee and the available resources;
- Statement of commitment signed by the authorised person.

Call for proposals for the ESEAS Product Coordinator

The ESEAS Product Coordinator will be responsible for

- coordinating the activities of the ESEAS Analysis and Supporting Centres;
- monitoring the performance of the ESEAS Analysis and Supporting Centres;
- provide a link between the ESEAS Analysis and Supporting Centres and the Central Bureau;
- maintaining a list of products conforming with the users' needs;
- ensuring the accessibility of products.

Nomination for the ESEAS Product Coordinator can be submitted by all ESEAS components providing or distributing products (National Centres, Analysis Centres, and Supporting Centres). The ESEAS Product Coordinator will be elected by the Governing Board from the responses to this solicitation.

Nominations for the ESEAS Product Coordinator must include:

- Cover page with the full address of the nominating institute and the name and function of the authorised person;
- Name, affiliation and position of the nominee;
- Short description of the relevant experience of the nominee and the available resources;
- Statement of commitment signed by the authorised person.

Final date of submissions for all proposals and nominations:

20. September 2005

Please, feel free to contact ESEAS with questions and comments regarding this call via e-mail to Bente Lilja Bye, Director ESEAS Central Bureau, e-mail: eseascb@eseas.org or bente-lilja.bye@statkart.no, fax: +47-32118101, phone: +47-32118474, mobile: +47-97047001

Attachments:

ESEAS ToR
GEOSS 10-year Implementation Plan