

COTE

Evolution, Adaptation and Governance
of Continental and Coastal Ecosystems



COTE LabEx Call for Research Projects

Year 2013



The overall objective of COTE is to disentangle the mechanisms triggering the evolution of land and aquatic ecosystems in order to forecast their medium and long-term responses to environmental changes. The ultimate goal is to promote adaptive management measures ensuring their resilience and the maintenance of the resources they provide. Beyond the research activities already underway along these items within the different member labs, the cluster of Excellence COTE promotes more integrative and global approaches across disciplines and ecosystems, to upgrade our ability to predict the responses of ecosystems to ongoing and future environmental changes. The priorities of this year's call are therefore similar to last year's call. These three priorities are of equal importance without any order of priority.

1. Content and priorities of the COTE 2013 call for projects

- **Coupling of approaches to understand the mechanisms of evolution and adaptation of socio-ecological systems to global changes.**

The proposals may refer to one or several of the COTE workpackages (impacts, responses and scenarios: see Annexe 1) in one or several ecosystems (forests, agrosystems, hydrosystems), and as a priority they must associate research skills in at least 2 of the following scientific disciplines: physical, chemical and biological sciences of the environment, human and social sciences. This focus on coupling approaches that might seem remote from each other at first sight and yet are complementary, responds to the desire of COTE to assert its commitment to integration from the first years. The degree on integration and coupling of different factors will be a major evaluation criteria for projects under priority 1.

- **Interactions between ecosystems as a factor in their evolution.**

Adjacent ecosystems are prone to interactions and interdependencies, thus generating original mechanisms resulting in particular dynamics within each of the

ecosystems. Proposals regarding priority 2 should address interactions between ecosystems, which may refer to flows of matter, energy, particles, pollutants, etc. This list of interactions and interdependences is not restrictive. Any project proposed on this priority must consider at least two of the ecosystems studied in COTE. However coupling of several approaches (as under priority 1) will not be considered as an eligibility requirement in this case.

- **Modelling as a long-term forecasting tool.**

One objective of the COTE LabEx is to promote research into medium and long-term forecasting of ecosystems responses to environmental and anthropic impacts, based on modelling and simulation approaches. The modelling proposals should fit in with workpackage 3 (trends and scenarios) of the COTE project. They may concern one or several ecosystems and one or several approaches (physics, chemistry, biology, human and social sciences) of the COTE LabEx.

The aim being to stimulate interaction between teams and disciplines, this Call for Projects will only consider joint projects constructed by at least two different member labs of the COTE LabEx.

2. Credit Allocations

Each selected project will be allocated a budget package comprising :

- a maximum annual endowment of €30,000 exclusive of tax (operating, assignments, small equipment, etc.) over three years,
- one full thesis allowance (€32,000 a year for three years)
or one full post-doctoral allowance (€46,445 a year for two years)
or two half thesis allowances (2 x €16,000 a year for three years)
or two half post-doctoral allowances (2 x €23,222 a year for two years).

In case of proposal for half thesis allowances, the source of the second half allowance should clearly be indicated, and the allowance will be granted only if the cofunding has been obtained during year 2014.

This grant will have to be used before 31/12/2017.

3. Eligibility Conditions

3.1. Criteria

The projects should fit within at least one of the declared priorities (see Paragraph 1). They should involve at least 2 co-contracting COTE units, one of which must play the role of project leader.

Co-contractors can only be member labs of COTE or research teams within COTE member labs declared to be affiliated to COTE . The projects may include external partners, although such partners must be financed by other sources.

Supervisor(s) of PhD Student(s) receiving their scholarship through the project should be members of COTE.

3.2. Expenditure

- **Operating expenditure and wages (excluding doctoral or post-doctoral contracts) financed by the LabEx (there may be co-financing) must not exceed €30,000 excluding tax per year.**
- Eligible expenditure:
 - o Operating expenditure → laboratory expenses (fluids, documentation and digital resources, small equipment of a unit value equal to or less than €4,000 excluding tax, consumables...); teaching expenses (documentation, digital resources, small equipment of a unit value equal to or less than €4,000 excluding tax); expenses relating to maintenance of equipment for use on the project; travel expenses of permanent or temporary personnel allocated to the project; intellectual

property costs of patents or licences induced by the operation; service provisions¹...

- Personnel expenditure directly related to the project → temporary personnel.
- Non-eligible expenditure: equipment for an amount of more than €4,000; temporary personnel contracts of a duration exceeding 3 months.

4. Project Evaluation

The projects will be reviewed by members of the COTE Scientific Advisory board, and external experts.

5. Language

The proposals should be written in English.

6. Schedule and Practical Terms

- Launch of the call for projects: 25 June 2013.
- Deadline for submitting application files: **23 September 2013** by e-mail to COTE project manager (manager-labexcote@univ-bordeaux.fr); response form available for download on: <http://cote.labex-univ-bordeaux.fr>, Call for Projects section.
- Selection of projects: early December 2013.
- Earliest starting date of projects: Q2 2014.

For any additional information, please contact Audrey Thoraval, COTE project manager:

05 40 00 22 55 - manager-labexcote@univ-bordeaux.fr

¹ See Article 3.4 of the [Regulations on Initiative of Excellence call for projects subsidy allocation \(http://www.agence-nationale-recherche.fr/investissementsdavenir/documents/2013/ANR-REGLEMENT-IDEX.pdf\)](http://www.agence-nationale-recherche.fr/investissementsdavenir/documents/2013/ANR-REGLEMENT-IDEX.pdf) of 26 March 2013

Annexe 1 : COTE workpackages

WP 1: Drivers and impact of environmental change

In this first part of the project, we will investigate the drivers of environmental change and their impact on ecosystem properties. Ecosystem properties are defined in terms of ecosystem structures (spatial, genetic or temporal organisation), processes and services. This LabEx project will bring together diverse types of expertise, making it possible to investigate the physical, chemical, biological and socio-economic drivers underlying global and local changes for the same research objects. The impact of these drivers will be monitored in the various infrastructures and facilities considered within the framework of national or international initiatives.

WP 2: Ecosystem responses and evolution

The second part of this project will address the various responses of ecosystems to the environmental changes studied in the first part of the project. The targets of ecosystem evolution may be populations, species, communities or entire environments and this process may have different outcomes. In this project, we will decipher the mechanisms and processes underlying resistance, adaptation, transformation or even the creation of ecosystems.

WP 3: Future trends and scenarios

The responses of ecosystems to the major trends dissected in the first two parts of this project will then need to be considered over longer time frames, for the purposes of long-term prediction. In addition to integrating diverse drivers and variable adaptive responses, predictions must also take into account less tangible attributes of ecosystems and society (e.g. potential risks in a changing environment, or the supply of services to society, policy measures). This third part of the project will deal with long-term predictions, which have been less thoroughly explored than the aspects considered in the first two parts of the project.