

1. Context and objectives of the Call for Proposals

This third Call for Proposals (AAP) takes place in line with the movement inspired by the “Biodiversity, Science and Governance” 2005 Paris conference. Since then, other initiatives and conferences held in the same spirit have taken place, for example, the OSCE1 Diversitas conference in Mexico in November 2005 (<http://www.diversitas-international.org>) or the setting-up of the ERA-net BIODIVERSA, run by the IFB (Institut Français de la Biodiversité) between 2004-2008 (<http://www.eurobiodiversa.org>). These initiatives have drawn attention to the necessity for moving on to research with a greater scientific ambition and scale. This is understood here as a change of scale, not a geographic change of scale (although desirable in certain circumstances), but a **change in scale in the scientific ambition and structure of the scientific community**. *A priori*, a set of themes should be able to be covered by one, or even two projects bringing together the majority of key French players in these areas.

The 2007 Call for Proposals (AAP) also reflects the hope of approaching the particularly complex problems that, in responses brought forward in 2005-2006, the **scientific communities had insufficiently tackled, in particular with regard to the conservation of biodiversity and the management of ecosystems**. The same is true for the use of modelling and quantitative tools that have been singularly absent. **Consequently, there is a deficit in finalised research projects on the management of biodiversity as well as projects favouring experimentation and modelling**. The biodiversity programme therefore remains as an interdisciplinary programme of cognitive and finalised research that covers all research activities carried out on biodiversity. **The 2007 AAP seeks to favour the dynamic aspects (process). The descriptive aspects (patterns), once they are clearly associated with these dynamic aspects, will also be considered.**

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2. Scope of the Call for Proposals

3. Set of central themes

The AAP is mainly based on priority themes in the framework of the **national research strategy on biodiversity** (<http://www.gis-afb.org/publications>). In 2007 it has been suggested **to focus research on three of these central themes, insisting in particular on themes 3 and 4:**

- **Theme 1: Understanding the dynamics of biodiversity and predicting the changes in natural and artificial or controlled environments.** The projects could notably
 - Benefit the development of innovative multi-disciplinary research allowing a functional approach to biodiversity;
 - **Support the emergence of models and mathematic and computerised simulations of the systems dynamics allowing the understanding and prediction of interaction and climatic change effects on biodiversity and on the future of the biosphere and societies;**
 - **Support experimental approaches allowing the confirmation of conceptual and digital models via analysis and follow-up of real ecological systems;**
 - Support long-term observation mechanisms and reinforce dynamic databases (metadata);
 - Concentrate on particularly human-induced transformation areas (agricultural areas, exploited forests and coastal areas)
 - Concentrate on the environments of overseas French territories, rich in biodiversity, where they can be examples for the understanding of biodiversity and its evolution in general.

- **Theme 2: Evaluating the ecological, economical and social impacts of changes in biodiversity and the relations between societies and biodiversity** : the projects could notably
 - Support approaches equally shared by the ecology and the social sciences in order to predict the economic and social consequences of changes in biodiversity;
 - **Support research into the genetic diversity of species that have been strongly affected by human societies;**
 - **Develop ecological approaches into health issues by seeking to connect the areas of medicine and environment; effects of regional planning on health, global changes, environmental variations and consequences in terms of development of pathogenicity.**

- **Theme 3: Developing practices of long lasting practices and conservation of species and their habitat:** the projects would notably

- Analyse the basis of society's choices that leads to the erosion or the preservation of biodiversity;
- Develop innovative approaches aimed at orientating, in a beneficial manner, the practices and conservation of biodiversity;
- Facilitate relations between research and the management of ecosystems in particularly human-induced transformation areas: agricultural areas, exploited forests and coastal areas.

1. General project characteristics that the introducers are encouraged to take into account

- Interdisciplinary aspects

Although the mobilisation of human and social science is indispensable for the understanding of the dynamic of biodiversity, they have not reached a sufficient level of representation nor a satisfactory level of interdisciplinary integration since the first AAP's. Particular care must therefore be brought to the integration of human and social sciences into protocols when this is made necessary by the subject being treated.

- Particular methodological approaches

During the course of the first two Call for Proposals majority of accepted projects were essentially of a cognitive nature, also leaving relatively little room for experimental approaches (*in-situ* or *ex-situ*) and modelling approaches (global change interaction and biodiversity, evolution scenario of the biosphere to help decision-making and adaptation of societies). Another observation is that few of the finalised research projects went as far as the selection process. It is therefore hoped **that modelling approaches, experimental approaches and finalised research are developed in particular with relation to the following points:**

- Biodiversity and management of resources ;
- Biodiversity submitted to exploitation (including theoretical basis) ;
- Climatic regionalised scenarios and consequences on biodiversity and on natural and social systems ;
- Biodiversity and health (in a complementary fashion with other AAP's of the ANR (see theme 2)) : regional planning, observatories (animal, plant and microbial species) ;

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- Economical evaluation of biodiversity and of the services derived from it by humans: economic evaluation of the irreversible erosion of biodiversity. Evaluation and integration methodologies in the assessments of projects on infrastructure, development of space or industrial projects.

- **Recommendations concerning the types of research subjects (in particular in the environment) to be favoured:**

- **Agricultural areas and exploited forests :** Agriculture and the exploitation of forestry alter the biodiversity of the environment in an important way. In many regions of the world, the spread of cultivated areas is done through a radical transformation of the original environment, consequently asking the question of alternative transformations enabling the preservation of certain levels of biodiversity. Even so, can we improve the methods of forestry exploitation in order to preserve, as best as we possibly can, the biodiversity? Furthermore, can we improve biodiversity in regions where it has been radically reduced by agriculture? Can we also improve the biodiversity of largely degraded forest areas?
- **Coastal areas :** More than half of the 6 billion individuals that currently represent the world human population live at least 50 km from the coasts. All the forecasts predict that the occupation and evolution of the “artificialising” of this area will be rapidly growing. The increase in permanent or seasonal coastal populations, generalised on a planetary scale, weighs heavily on the marine environment and its biodiversity, including its resources. The estuaries, deltas, humid zones, beaches and the coastal waters, in particular the coral reefs as well as the fauna and flora that they shelter, are threatened by the effects of pollution and the loss of habitats, to which are added those inevitable effects of climatic change. There is therefore room to especially take into account all aspects relating to biodiversity within a belt of about one hundred kilometres from the coastline up to the limit of influence of the coast inland, as much from the point of view of the ecosystem as that of the long lasting development and adaptation of societies to global change.
- **Intra-specific biodiversity and genetic resources :** Projects with reference to intra-specific biodiversity of genetic resources used by man are equally eligible.
- **Polar environments :** The International Polar Year (IPA) 2007-2008, is going to represent an opportunity to federate research on the marine and terrestrial biodiversity of high-latitude regions and its current evolution appears amplified and faster paced than elsewhere.

2. Criteria of eligibility and evaluation

The criteria of eligibility and evaluation used during the selection procedure described in appendix, are listed below (§1).

3. Criteria of eligibility

To be eligible, the project must meet the following conditions:

- The coordinator of the project **cannot be a member of the evaluation committee** of the programme;
- E-mailed dossiers and dossiers sent by mail (both documents must be identical) must be submitted **within the deadlines** in the requested format and must be complete;
- The project must be **within the scope** of the call for projects;
- The duration of the project must be from **3 to 4 years**;
- The projects must bring together **at least two partners**; but the necessary interdisciplinary aspects logically bring together a larger number;
- The total cost of the **project must be more than €500,000 (tax incl.)**.

Important: dossiers not satisfying the criteria of eligibility will not be submitted to outside expert opinion and will in no case be the subject of financing from the ANR.

Evaluation criteria

Projects will be examined according to the following criteria :

- **Relevance of the proposal with regard to the orientation of the call for projects:**
 - o Thematic appropriateness to the central theme of the Call for Proposals(cf. § 2.1);
 - o Appropriateness of the “recommended” project characteristics (cf. § 2.2).
- **Scientific and technical quality:**
 - o Scientific excellence in terms of progress of knowledge compared to the current state of technological knowledge;
 - o Innovative character, according to the case, in terms of subject matter, knowledge progress, technological innovation or aspects of innovation compared to the current situation;
 - o Lifting of scientific or technological barriers.
- **Methodology, quality of project construction and coordination:**
 - o Positioning compared to current technology or methodological innovation;
 - o Technical and scientific project feasibility and choice of methods;
 - o Structuring of project, accuracy in the definition of final results (deliverable) and identification of landmarks;

- o Quality of the coordination plan, in particular with regard to interdisciplinary aspects (as well as the experience, financial and legal management of the project);
 - o Strategy of beneficiation and protection of project results, management of questions on intellectual property.
- **Global impact of the project:**
- o Use or integration of project results by the scientific community and impact of the project in terms of acquisition of know-how;
 - o When it is raised, handling of questions on environmental impact.
- **Consortium quality¹:**
- o Level of scientific excellence or team expertise;
 - o Appropriateness between partners and scientific and technical objectives;
 - o Complementarity of the partner;
 - o Majority implication of permanent researchers compared to the fixed-term contracts;
 - o Opening up to new players;
 - o Participation of teams from “Southern” countries when the research subjects relate to environments located in their country (see below).
- **- Project appropriateness – resources and feasibility of the project:**
- o Likelihood of schedule;
 - o Justification of requested financing: taking into account the costs of coordination...

Provisions on financing

The financing granted by the ANR to each partner will be brought about in the form of non-reimbursable aid, in accordance with the provisions of the “Regulation on the methods of allotment of aid from the ANR”, available on the ANR internet site.

Only partners residing in France, French associated international laboratories of research organisations and higher education and research establishments or French institutions located abroad will be eligible as beneficiaries of ANR aid. However, the participation of foreign partners is possible:

- If they ensure their own project financing;
- If they are in a position to offer services to partners of the project financed by the ANR.

Important: the ANR will not grant aid of less than €15,000 to a project partner

¹ For a “research organisation/company” partner project, the labelling of the project by a “competitiveness pole” (cf. §5) is considered as an indicator of quality. This indicator will be taken into account in the framework of the review by the steering committee. It is reminded all partners of a project do not have to be members of a pole or be located in the region for the project to be labelled as a “project pole”.

For companies², the **maximum level** of ANR aid is as follows:

Denomination	Maximum level of aid for SME's ³	Maximum level of aid for companies other than SME's (3)
Fundamental research ⁴	50% eligible expenses	50% eligible expenses

- Academic theses and fixed-term contracts

Projects will be comprised not only of **material resources** (functioning, equipment), but will also allow **recruitment under a fixed-term contract (CDD) for young doctoral scientists, subject to the agreement of an *Ecole Doctorale (Doctoral School)* and with prospects of later employment, post PhD, of engineers and technicians. Recruitment applications will have to be duly motivated.** In particular, with regard to fixed-term contracts which would be offered to young students having registered for a thesis or likely to register for a thesis, the evaluation committee will be asked to **1) verify that in the project the subject of the thesis and the proposed supervision are satisfactory, 2) in the event of an excessive number of applications, the evaluation committees will propose which projects to support. Any possible financing by the ANR does not guarantee the authorisation of the university regarding registration for a thesis.**

Conditions relating to competitiveness poles

The project partners will have the possibility to mention whether the project is part of a labelled project or is in the process of being labelled by a competitiveness pole (or several in the event of "interpole" projects).

Partners of a project labelled by one or several of the competitiveness poles and selected by the ANR within the framework of this Call for Proposals are likely to receive additional financing by the ANR.

The coordinating partner or the partner(s) for each competitiveness pole concerned, will have to transmit to the ANR a labelling certification form, duly filled in and signed by a representative of the pole governance structure, within a **deadline of six weeks maximum after the deadline for the sending of completed projects via e-mail.** The procedure to follow is described in appendix (§ 2).

² cf. definitions of data in appendix § 3.3

³ More specifically, an SME is an **autonomous** undertaking, comprising up to 249 employees, with a turnover of less than €50 million or a total balance of less than €43 million (cf. appendix § 3.3).

⁴ cf. definitions of data in appendix § 3.1