



Research programme "Science for a Sustainable Development" (SSD)

# "POLAR RESEARCH, CLIMATE AND ATMOSPHERE"

"AFRICA AND AFRICAN HERITAGE"

Call for proposals 6

July 2010

**Closing dates** 

Expression of interest (obligatory): Monday 6 September 2010

Research proposals: Monday 20 September 2010 at 12:00 a.m.

**INFORMATION FILE FOR USE BY PROPOSAL SUBMITTERS** 





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# FOREWORD

- This document contains all information useful to the teams wishing to participate in the call for research proposals in the framework of the "Science for a Sustainable Development" research programme.
- ➤ The Public Planning Service Science Policy ("BELSPO") supervises and coordinates the Programme at both the scientific and administrative levels.
- The call is for proposals for 4-year research projects, prepared by interdisciplinary networks of teams belonging to at least two separate Belgian scientific institutions, including at least one university institution.
- The call is intended for Belgian university institutions, public scientific institutes, non-profit research centres, and specialised consulting offices. These last-mentioned can be financed up to maximum 25% of the total budget requested by the network.
- The project may require punctual expertise which can be delivered in **subcontracting** form. Such subcontracting may under no circumstances amount to more than 10% of the total budget requested by the network.
- If it brings in an added value to the project and to the development of Belgian expertise, submitters may propose a cooperation with a non-Belgian universities or public research institutes (except for international institutions such as the Joint Research Centre). This participation will take place on a co-funding basis. The funding of non-Belgian partners by BELSPO will under no circumstances amount to more than 20% of the total budget requested by the network. The non-Belgian partner is responsible for the co-funding, from other sources, for at least the same amount as the amount asked from BELSPO<sup>1</sup>.
- > The **participation of Federal Research Institutes** and the cooperation between partners from **different Communities or Regions** is encouraged. For equal scientific quality between introduced proposals, the preference will be given to consortiums composed of partners from different communities and/or consortiums with participation of Federal Research Institutes.
- > The personnel funded in the project **must be recruited under an employment contract**. Thus, no scholarship student can be taken on in the framework of the project.
- This call offers the possibility of using earth observation data via cooperation with the Space Research and Applications Service and for additional research in the framework of international commitments of the federal government via cooperation with the Service for International, Interfederal, and Interdepartmental Coordination of BELSPO.
- > Expressions of interest and proposals must be submitted in **English.** Proposals must be accompanied by a summary in the coordinator's language. If the submitters deem it useful, a version of the proposal may also be submitted in the coordinator's language.

<sup>1</sup> For the participation by the "Université du Luxembourg" or by a public research institute from the Grand Duchy of Luxembourg, the "Fonds National de la Recherche Luxembourg" disposes of a budget of 270.000 euro for co-funding the research activities of Luxembourgian partners. In order to know more about the conditions of co-funding by the "Fonds National de la Recherche Luxembourg", Luxembourgian candidates should contact Mr Carlo Duprel (carlo.duprel@fnr.lu, Tel: +352 26192537, Fax: +352 26192535, www.fnr.lu) as soon as possible.





- The submitters are obliged to comply with the modalities laid out in this document. Otherwise BELSPO will not consider their proposal.
- Interested parties must submit an expression of interest, using exclusively the form available on the BELSPO website (<u>http://www.belspo.be/</u>), no later than Monday 6 September 2010. Only those who submit an expression of interest may later submit a complete proposal. The expressions of interest will be used by BELSPO only in order to seek foreign experts for the evaluation of the research proposals.
- > The proposals must be sent **in two paper copies** to the following address:

# BELGIAN SCIENCE POLICY OFFICE (BELSPO) RESEARCH PROGRAMME "SCIENCE FOR A SUSTAINABLE DEVELOPMENT" CALL 6 LOUIZALAAN 231 AVENUE LOUISE 1050 BRUSSELS

The proposals must also be sent in electronic form (word and pdf format) to:

SSD\_call6@belspo.be

# Closing dates:

Expressions of interest (mandatory): Monday 6 September 2010

Research proposals: Monday 20 September 2010 at 12:00.





#### 1. THE PROGRAMME "SCIENCE FOR A SUSTAINABLE DEVELOPMENT"

#### 1.1 Context

The following elements of the international, European, and national contexts may act as important beacons for maintaining economic growth, appropriate social development, and protection of the environment. They offer a frame of reference for the various actions planned within the Programme.

#### 1.1.1 At the international level

- Belgium's various commitments in the framework of different international Conventions and Agreements, the recommendations formulated by various international organisations, and all the European directives, strategic plans, implementation plans... with which Belgium must comply in the areas involved.
- The efforts been made for some time now with regard to the creation of a European Research Area (6th Framework Programme, 7th Framework Programme), in particular the strengthening of cooperation at the level of research projects and programmes (Networks of Excellence, ERA-NETs).

#### 1.1.2 At the national level

- The priorities defined in the various government coalition agreements, in the various (sectoral and trans-sectoral) policy plans and policy strategies elaborated at the National level, Federal level or at the level of the Regions and the Communities.
- The position of BELSPO within the Belgian research landscape, which offers possibilities for:
  - the analysis of trans-sectoral or horizontal themes corresponding to the competences of different federal departments;
  - the analysis of issues managed at different levels of authority (federal, Regions, Communities).

#### **1.2** Objectives of the Programme and Implementation modalities

#### 1.2.1 Strategic and operational objectives

From a **strategic** perspective, the objectives of the Programme are:

- to preserve and develop the scientific potential in various strategically important areas, with the objective of reducing scientific uncertainties and anticipating future needs for knowledge;
- to offer the authorities of the country the scientific support required for the preparation, implementation, and follow-up of a supranational, federal, regional, or local policy in and between these areas;
- to offer the Belgian research potential in the areas involved the possibility of integrating itself into the various research initiatives at the European and international levels, in particular within the European Research Area.

From an **operational** perspective, the proposed Programme will contribute to developing scientific knowledge and instruments (databases, models, concepts, indicators, etc.) aiming to:





- the analysis of processes: understanding, monitoring, evaluating, and forecasting processes and their mutual interactions which constitute the basis of the functioning of both anthropogenic and natural systems;
- the study of impacts: evaluating the effects of changes in/the evolution of processes and their mutual interactions at the environmental, social, and economic levels;
- the development, follow-up, and evaluation of (existing and/or future) policy measures, on the basis of criteria such as efficiency, feasibility, acceptability... Among other things, the research will study policy measures focused on prevention, adaptation, remediation, management...

#### 1.2.2 Diversified implementation

To fulfil these objectives, the Programme provides a diversified approach which:

- combines sectoral, trans-sectoral, and integrated approaches to the concerned issues;
- encourages interdisciplinary research so as to offer support to decision-making on the basis of an
  integration of different dimensions, perspectives, etc. of the issues concerned and to promote
  dialogue and information exchange between scientists, decision-makers, and other involved
  actors;
- offers space for **oriented basic research** and **targeted research actions**:
  - **oriented basic research** will anticipate needs, especially at policy level, by playing a futureoriented and/or alarm-sounding role and by eliminating specific uncertainties, in order to offer a scientific basis for decision-making. Oriented basic research also contributes to (inter)national research efforts.
  - **targeted actions** aim to formulate, within a relatively short time span, answers to specific policy issues at the (inter)national level. This may involve applied research, exercises integrating scientific results, proposals for harmonising, standardising data and information...
- offers possibilities for the **internationalisation of Belgian research**, via:
  - the opening up of this Programme to foreign researchers;
  - initiatives promoting cooperation and synergies between national thematic research programmes, such as ERA-NETs<sup>2</sup> (European Research Area Networks). BELSPO is currently involved in a number of ERA-NET projects<sup>2</sup>. This opens the way to developing and implementing joint transnational activities such as joint calls, project clustering, etc.;
  - support for the participation of Belgian researchers in international and supranational research programmes and networks, such as those of the European Science Foundation, the European Union, the International Energy Agency, the United Nations, the International Council for Science, etc.
- promotes cooperation between research projects funded within the different research areas of the Programme and/or in the framework of other initiatives of BELSPO when these are mutually complementary or demonstrate common areas of interest (clustering). The aim is to ensure greater coherency in research and to give the research added value in specific fields.

<sup>&</sup>lt;sup>2</sup> see www.belspo.be/SSD





# 1.3 <u>Research priorities</u>

The priority research areas of the present Programme are linked to the national and international context described above. The whole set of priority research areas was chosen because of the need to address the complex, global, interrelated problems underlying a sustainable development policy. This choice is a response to strategic needs, at different levels of authority, for policy-supporting research and to the challenge of maintaining and developing national scientific expertise in complex and strategically important areas.

The **priority research areas** are:

- Energy
- Transport and mobility
- Agri-food
- Health and environment
- Climate (including Antarctica)
- Biodiversity (including Antarctica and the North Sea)
- Atmosphere and terrestrial (including freshwater) and marine ecosystems (including Antarctica and the North Sea)
- **Transversal Research**: In order to better translate/operationalise the concept of sustainable development, in and between the priority areas, **transversal and generic research** is necessary.

The goal of the research actions is to support specific decision-making in relation to both sector-related and trans-sectoral problems. The Programme thus promotes **interactions between the priority research areas**, so as to respond to common and complex problems such as air pollution (tropospheric ozone, aerosols...), environment-health relations, the impacts of genetically modified organisms (GMOs), the life cycle of products and services, renewable forms of energy, the challenge of globalisation, the integrated management of coasts and basins...

The research must take into account the (complexity of) interactions between the priority research areas. This constitutes an essential guideline throughout the programme (calls for proposals, project selection and management, the valorisation of research results).

For this are planned:

- the integration of interactions and common themes in the appropriate calls;
- joint calls between priority research areas;
- the "clustering" of projects covering different aspects of common and complex problems.

Within these priority research areas, the Programme encourages the submission of proposals dealing with **standardisation**.

For more information, see www.belspo.be/SSD

# 1.4 Continuity with SPSD I, SPSD II programmes

The research programme "Science for a Sustainable Development" is the continuation of the first and second Scientific Support Plan for a Sustainable Development Policy (SPSD I (1996-2001) and SPSD II (2000-2005)).

Compared to SPSD I and II, the Programme integrates new themes, namely "Health and Environment" and "Standardisation". These themes build upon the previous programmes "Workers' healthcare" and "Standardisation and Technical Regulation", which both formed part of the "Scientific Support Plan for





integrating the concepts of quality and safety of production environments, processes, and goods into a context of sustainable development" (1998-2003).

On the one hand, all submitters of research proposals **must take account of the research activities conducted in the previous programmes** (see <u>www.belspo.be/fedra</u>).

On the other hand, a **research proposal that is a continuation of a project** funded in the framework of the aforementioned programmes must **clearly describe the relationship of the new proposal to the previous project and its added value** with respect to it. BELSPO will provide the experts in charge of the scientific evaluation of the proposals (see point 4.2) with the relevant English-language material (final and/or interim scientific reports, findings of evaluations, etc.).

These elements will be taken into consideration when evaluating the research proposals.

#### **1.5** Complementarities with other research actions

The research will be performed taking into account:

- the other (previous and/or current) research actions of BELSPO:
  - the research programmes Information Society, Belgian Coordinated Collections of Microorganisms (BCCM), Social Cohesion, Agora, Earth Observation Research Programme (STEREO I and II), Interuniversity Attraction Poles (IUAP), Technological Attraction Poles (TAP), Action in Support of the Federal Authority's Strategic Priorities, Society and future, etc.;
    - research within the federal scientific institutions.
- other research actions carried out at the federal, regional or community levels.

According to the priority research areas of the Programme, the calls for proposals will establish more direct links with some of these research actions (see e.g. point 3.5).

# 2. CONTENT OF THE PRESENT CALL

#### 2.1. Polar research, Climate and Atmosphere

The "Polar research, Climate and Atmosphere" research axis consists of two sub-themes:

- <u>Polar oceanographic research</u>, which is confined to oceanographic climate and biodiversity research
- <u>Climate and Atmosphere</u>, which aims for better projections of climate change in the future

#### 2.1.1 Polar oceanographic research

The North and South Poles and surrounding polar oceans are recognised as sensitive barometers of environmental change:

- the polar regions are changing faster than any other region on Earth, with ecological, economic and social consequences at the regional and global level,
- polar change is critical due to the many feedbacks, involving the oceans, cryosphere and biosphere, each with the potential to accelerate global change,
- as heat sinks of the climate system, the poles drive changes and react to change elsewhere on Earth.





Polar research is therefore crucial to our understanding of the planet and our impact.

The Federal government has a long tradition of research in Antarctica. BELSPO has funded and organised the Antarctic research programme since 1985. In recent years this research has been incorporated in the umbrella Programme Sustainable Development (SPSD I and II and the current SSD programme). In line with the international trend there is a need to broaden the support to Polar research by adding Arctic research, with the aim of improving our understanding of the poles and polar systems, as well as their interactions and global impact.

The current call relates solely to polar oceanographic research and covers the following topics and research priorities:

- study of sea-ice-ocean-atmosphere interactions, their impact on ecosystem functioning and associated biogeochemical cycles and their feedbacks within the global Earth system
- study of observed changes and modelling of the evolution of sea ice
- study of the impact of the 2-way interactions between the polar ocean systems and climate on the past and present evolution of the Earth system
- improvement of coupled atmosphere-ice-ocean-biogeochemical models in support of better climate predictions and projections, and subsequent ecosystem feedbacks
- study of oceanographic biodiversity, biogeography and evolution, impact of future changes
- linking marine biological patterns with evolutionary, ecological and physiological processes in the perspective of global change
- development of integrated spatial models to predict the impact of future climate changes on oceanographic biodiversity and ecosystems

These research priorities are consistent with the findings and proposed research priorities of the following international working groups and reports:

- fourth Assessment Report of Working Group 1 of the Intergovernmental Panel on Climate Change (IPCC)
- Arctic Climate Impact Assessment (ACIA) report
- SCAR report Antarctic Climate Change and the Environment (ACCE)

#### 2.1.2. Climate and Atmosphere

Climate change and variability constitute a significant threat to society and the environment and can endanger social and economic development. On the other hand, climate change may be seen as a challenge to evolve towards a more sustainable society.

Science plays a vital role in all aspects of climate change, from understanding the functioning of the climate system to investigating how society might respond through mitigation and adaptation.

Though decisions as how to reduce and adapt to climate change are largely based on social, economic and political considerations, it is an absolute necessity that each and every economic analysis is supported by positive science.

This call concentrates on understanding the climate system and atmospheric processes.

Knowledge of the climate system is necessary to develop future climate projections on various spatial and temporal scales, preferably on the short term and regional scale. Reliable and quantitative projections of the future climate are essential as a basis for impact studies, risk analyses, the development of an adaptation policy, and as a foundation and test bed for emission production strategies.





Despite huge advances in our knowledge of the climate system, in the detection of change, in the identification of climate change causes and in the accuracy of model-based climate change projections, the complex system is not yet sufficiently understood. Though robust findings have been established, there remain a great many uncertainties with regard to the underlying processes, feedback mechanisms and models.

# The ultimate objective of this call is to develop the scientific basis for better projections of climate change (and its consequences) on short time periods and on a regional scale (Europe, Africa).

The specific objectives of this call are:

- (1) the development of global (GCMs, ESMs) and regional models, with a better temporal and spatial resolution and better integration of new knowledge relating to the underlying processes and feedback mechanisms.
- (2) evaluation by means of GSM, ESMs and regional models of climate change/variability in the short and long term, of meridional overturning circulation (MOC), of changes in sea level, etc.
- (3) advancement of knowledge relating to underlying processes, such as
  - a.atmospheric processes (evolution of the atmosphere including the mesosphere), the role of non-Kyoto components such as water aerosols (including black carbon and volcanic ash), tropospheric ozone (including formation through, for example, biogenic emissions), clouds (cirrus, contrails),...
  - b.biogeochemical cycles (the C-cycle (including ocean acidification), the CH4 cycle, ...)
  - c.processes linked to changes in the use and use-allocation of land surfaces (deforestation & forest degradation, urbanisation).

# 2.2 Africa and African heritage

**The natural heritage of tropical Africa** is a shared asset, the result of a long evolution and complex interactions between humankind and nature. More than ecological capital for valorisation, to be passed on to future generations, it represents a real 'life assurance' policy for African society and the whole of humanity.

The majority of the African population derives its sole means of sustenance from nature. It is necessary to preserve the biological diversity of which this nature is comprised and to use it sustainably, if only to guarantee the vital needs of the population: food security, access to drinking water, health, bioenergy.

But today this biological diversity is under severe threat. The main reasons for this are known: overexploitation of resources, pollution, changes in the nutrient cycles, loss and fragmentation of habitats, deforestation, invasive species, climate change. The accumulation of these pressures disturbs the natural balance, endangers the goods and services which the ecosystems provide, further increases the vulnerability of the populations dependent on them, and increases poverty.

Protection of the environment is one of the Millennium Development Goals (7a-b). The Europe-Africa scientific partnership (P8) also encourages science in support of the challenges faced in climate, sustainable agriculture, food safety and health.

This call aims to contribute to a **better understanding and appreciation of the natural heritage of tropical Africa (Central Africa in particular)** with a view to the preservation and sustainable use of resources. It gives the SSD programme a North-South dimension, which to date has been too little developed.





# The call specifically covers aspects related to biological and ecosystemic natural resources. The prioritised ecosystems are the tropical rainforests and fresh surface waters: lakes, streams and rivers.

The lines of research specific to the call are:

- 1. study and prediction of biodiversity and ecosystem dynamics, using, among other things, biological, ecological, sociological and cultural information and recent and past data series gathered in the field and/or via remote sensing (see point 3.5.1)
- 2. better understanding of interactions between biodiversity and the functioning of ecosystems and ecosystem services in the context of environmental and climate change
- 3. study of the impact of climate change, loss of biodiversity, the state of the ecosystems and the vulnerability of the local population to the emergence and spread of infectious diseases.

Collaboration with African scientists is recommended.

The mechanisms described in point 3.3.1 (subcontracting, foreign partners) and 3.5.2 are designed to facilitate this collaboration.

#### 3. **PROFILE OF THE PROPOSALS**

#### 3.1. Profile

Research proposals should make use of existing research results in the field as well as justify the chosen case studies.

According to the financed projects, a co-operation will be eventually organised by the PPS Science Policy.

# 3.2. Duration and Budget

The present call offers room for 4-year research projects.

Taking into account the resources made available, the projects selected within the framework of the present call will start at the end of 2010.

The overall available budget for this call is **10,20** millions Euro, 7 millions for the research axis "Polar Research, Climate and Atmosphere" and 3,2 millions for the axis "Africa and African heritage". The total project budget is limited to 1.200.000 Euro for the research axis "Polar Research, Climate and Atmosphere" and 800.000 Euro for the axis "Africa and African heritage".

The Belgian Science Policy will take care of the real expenses of the Belgian partners for taking part in campaigns to foreign countries (in particular Polar Regions and Africa), in addition to the financing of the project.

#### 3.3. Submission modalities

#### 3.3.1 Network

Each proposal is submitted by an **interdisciplinary network**, belonging to at least two separate Belgian scientific institutions, of which at least one is a university institution.





The network partners must conduct complementary activities related to a common issue and its integration.

All funded teams will jointly share all obligations and responsibilities during the implementation of the project. The contributions of the different network partners may differ according to the content. Accordingly, different partners may receive different shares of the total budget and devote different numbers of man-months to the research, provided they all bear in mind the principles of a network project.

The call is intended for **Belgian university institutions, public scientific institutes, non-profit research centres, and specialised consulting offices.** These last-mentioned can be financed up to maximum 25% of the total budget requested by the network.

The project may require punctual expertise, which can be delivered in the form of **subcontracting**. The cost of this subcontracting may under no circumstances exceed 10% of the total budget requested by the network.

The participation of Federal Research Institutes and the cooperation between partners from **different Communities or Regions** is encouraged. For equal scientific quality between introduced proposals, the preference will be given to consortiums composed of partners from different communities and/or consortiums with participation of Federal Research Institutes

If it brings in an added value to the project and to the development of Belgian expertise, submitters may propose a cooperation with **non-Belgian universities or public research institutes** (except for international institutions such as the Joint Research Centre):

- This participation will take place on a **co-funding** basis. The funding of non-Belgian partners by BELSPO will under no circumstances amount to more than 20% of the total budget requested by the network. The non-Belgian partner is responsible for the co-funding, from other sources, for at least the same amount as the amount asked from BELSPO.
- For the participation by the "Université du Luxembourg" or by a public research institute from the Grand Duchy of Luxembourg, the **"Fonds National de la Recherche Luxembourg"** disposes of a budget of 270.000 euro for co-funding the research activities of Luxembourgian partners. In order to know more about the conditions of co-funding by the "Fonds National de la Recherche Luxembourg", Luxembourgian candidates should contact Mr Carlo Duprel (carlo.duprel@fnr.lu, Tel: +352 26192537, Fax: +352 26192535, www.fnr.lu) as soon as possible.

The personnel funded in the project **must be recruited under an employment contract**. As a consequence, no scholarship student can be taken on in the framework of the project.

# 3.3.2 Coordination

A **coordinator** (belonging to a Belgian research institute in accordance with point 3.2.1, § 4) must be designated in each proposal. In addition to his/her scientific and management qualifications, the project coordinator must be able to synthesise and integrate the research results so as to promote applications and support to decision-making.

The specific role of the coordinator is:

- to coordinate all activities to be carried out in the framework of the project;
- to coordinate the internal meetings between the network members;





- to coordinate the meetings with the Follow-up Committee and production of the reports on these meetings;
- to coordinate the production of the interim and final project reports intended for BELSPO;
- to inform BELSPO of any problems that might interfere with the proper implementation of the project;
- to coordinate the synthesis and translation of research results, with a view to applications and support to decision-making;
- to coordinate the publication and dissemination of research results.

# 3.4. Follow-up Committee, Valorisation, and Data

#### 3.4.1 Follow-up Committee

Each selected project is accompanied by a Follow-up Committee. The objective of this committee is to provide **active follow-up** of the project and to promote **valorisation of the research**. It will carry out this role via the exchange and provision of data and information and by giving advice, suggesting valorisation avenues... This committee is convened once or twice a year (or more, if necessary).

The Follow-up Committee is composed of **potential users of the results**, such as representatives of public authorities at the national, regional, European, or international level, social actors, scientists, industrial actors... The members of the Follow-up Committee are non-funded partners.

In the research proposal, the submitters must describe the profile of the members of the Follow-up Committee (institutions and a list of possible members). The actual composition will be established in consultation with BELSPO. The committee will consist of **at least 5 people**.

#### 3.4.2 Valorisation

Each research proposal must include **concrete proposals for valorising** the research. This might involve, for example, the organisation of thematic debates and meetings, proposals for disseminating and popularising the results, proposals to integrate data into computerised databases on the national and international levels, the elaboration of targeted messages intended for experts, policy makers, or managers regarding the content of specific results, including its limitations, the related uncertainties, the hypotheses and methods used, etc. The target groups of these valorisation proposals must be explicitly described.

# 3.4.3 Use and management of data

Concerning the use of existing data or the collection of new data, proposal submitters should take the following guidelines into account:

- Whenever possible, the partners should make use of existing (administrative or non-administrative) databases to meet the needs of their research. For this they must check beforehand whether the data are accessible, at what cost, and how much time it will take to acquire the data. Should it appear after the start of the research that due to partner negligence or insufficient knowledge of the field the data files will *not* be available in time, this may constitute a reason for BELSPO to cancel the contract.
- If the proposal requires collecting new data (e.g. via a survey), the team must justify with clear and convincing arguments its choice of methodology, referring to the objectives of the study and specifying why this particular form of data collection is required and preferable to other approaches. This means the proposers must provide sound and detailed argumentation in support of the chosen methodology (sampling, etc.) and highlighting its added value as compared to existing databases. In addition the partners must provide the budget required for this data





collection.

• As the data collected in the framework of the proposed research must be available to other users for other purposes, the proposal must clearly indicate when and in what format the data are made accessible, specifying which categories of users are likely to benefit from access to the data.

#### 3.4.4 Intellectual Property

Foreground shall be the property of the Institution carrying out the work generating that foreground, as mentioned in article 13.2 of the general conditions of the contract (annexe 2).

For the research areas North Sea, Biodiversity and Antarctic, the researchers must bear in mind that the analysis and measurement data must nevertheless be transferred to specific data banks like IDOD/BMDC (http://www.mumm.ac.be/datacentre), AMD (Antarctic Master Directory (http://gcmd.gsfc.nasa.gov/KeywordSearch/Home.do?Portal = amd&MetadataType = 0), data bank BIOBEL from the Biodiversity platform (http://www.biodiversity.be).

# 3.5. Interactions with other BELSPO initiatives

#### 3.5.1 Space Research and Applications Service

Like other sources of information, remote sensing from space can contribute to better understanding and monitoring the evolution of the ecosystem Earth. Scientific expertise in this area is being progressively developed in Belgium, particularly through the various phases of the programmes TELSAT, STEREO I and II, and VG. Research within these programmes ranges from thematic basic research to pre-operational applications.

In order to make possible the conversion of earth observation data to useful "information", a multidisciplinary approach is necessary which requires close cooperation between the above-mentioned programmes and the programme "Science for a Sustainable Development".

This cooperation is translated into the following specific modalities:

- provision of earth observation data to the research teams on the basis of a justified request;
- reinforcement of the capacity to support the user community in general, via maintenance of an 'EODesk-type' information and help service: http://telsat.belspo.be.

# 3.5.2 <u>Service for International, Interfederal, and Interdepartmental Coordination<sup>3</sup></u>

Projects selected in the theme "Africa and African heritage" will be able to introduce begin 2011 a demand for a complementary budget of maximum 50.000 euro aimed at encouraging the formation of balanced networks between Belgian and African scientists. This budget will cover the cost for networking like organisation of common seminars, work visists, ... The cost of personnel will not be leigible.

<sup>&</sup>lt;sup>3</sup> Note: the possibility this budget from the Service for International, Interfederal, and Interdepartmental Coordination is independent from the possible co-financing of the non-Belgian partner (see point 3.3.1). Both mechanisms can be used together.





# 4. **PROCEDURES**

This paragraph describes the procedures for submitting a proposal, the project selection procedures, and the principal contractual obligations applying to selected projects.

#### 4.1 How to answer this call for proposals?

The submission takes place in two steps, first by filing an expression of interest and then by filing a research proposal.

Only those who submit an expression of interest before the stipulated deadline may later submit a complete proposal.

#### 4.1.1 Expressions of interest

Interested parties must submit an expression of interest, using the form intended for this purpose. These expressions of interest will be used by BELSPO **only** in order to **seek foreign experts for the evaluation of the research proposals**.

Expressions of interest are submitted in **English**.

#### Interested parties are asked to use *exclusively* the form available at the BELSPO website:

# http://www.belspo.be/

The expression of interest must be sent in **electronic form** to the following address:

# SSD\_call6@belspo.be

The expression of interest must reach BELSPO no later than:

Monday 6 September 2010

A receipt will be sent by email.

BELSPO will ignore expressions of interest submitted after the closing date.

Only those who submit an expression of interest in time may later submit a complete proposal.





# 4.1.2 Proposal submission

# General guidelines

The proposal is submitted by an **interdisciplinary network** in accordance with the conditions set forth in point 3.

The submitter is asked to use **exclusively** the forms that are downloadable from the internet site of BELSPO (<u>http://www.belspo.be/)</u>.

**No annexes** to the submission file will be taken into consideration during the evaluation and selection procedure.

Each proposal must be submitted in **English** in **2 copies**.

The proposal must be sent to the following address:

<b>BELGIAN SCIENCE POLICY OFFICE (BELSPO)</b>
RESEARCH PROGRAMME "SCIENCE FOR A SUSTAINABLE DEVELOPMENT"
CALL 6
Louizalaan 231 Avenue Louise
1050 BRUSSELS

The proposal must also be sent in electronic form (word and pdf format) to the following address:

# SSD\_call6@belspo.be

The proposal (paper and electronic versions) must reach BELSPO no later than:

# Monday 20 September 2010 at 12:00.

BELSPO will disregard proposals submitted after the above-mentioned closing date and time.

A receipt will be sent by email at the latest on 21st September 2010.

#### Forms

Each proposal form includes three separate sections.

Section 1 - Administrative data

Section 2 - Description of the proposal

Section 3 - Qualification and experience of the participants

The forms can be obtained from the BELSPO website at the following address:

http://www.belspo.be/





# 4.2 Evaluation and selection

#### 4.2.1 Bases for the evaluation

Proposals submitted in the framework of this call will be evaluated externally by foreign scientific experts qualified in the research field involved.

Only **complete submission files** (the English-language version) are presented for evaluation. **No annex** to the submission file will be taken into consideration during the evaluation and selection procedures.

The present text of the call for proposals serves as the basis for evaluating and selecting the proposals.

# 4.2.2 Evaluation criteria

The general evaluation criteria to be taken into consideration by the experts are the following:

# Compliance with the aims, content, and characteristics of the Programme in general (see point 1) and of the present call in particular (see point 2).

#### Scientific quality

- Clarity of the objectives and tasks, relevance of the method, positioning with respect to the state of the art in the proposed area
- Scientific originality of the proposed research, the innovative character of the expected results, strengthening of existing expertise, contribution of the proposed research to ongoing research in the area involved.

#### Scientific support to decision-making

 The link between the project's potential scientific results and the scientific support required in order to prepare and implement a supranational, federal, regional, or local sustainable development policy.

#### Quality of the research team(s)/network

- Experience and international contacts of the submitters
- Added value of the network
- Complementarity of the partners' skills
- Clarity of the division of tasks between partners
- A balanced distribution of funds among the partners
- Realism of the requested resources (duration, budget, personnel)
- Added value of foreign partner's contribution

#### Quality of the management and coordination

The coordinator's scientific quality and management, synthesising, and communication skills.

# Interdisciplinarity

 An interdisciplinary approach in order to meet the requirements of the sustainable development concept





## Valorisation

- Pertinence of proposals for disseminating and making available the information, especially in a
  perspective of support to policy decision-making;
- The member profile and role of the Follow-up Committee.

**Added value with regard to projects funded under previous programmes** (SPSD I, SPSD II) (see point 1.4)

#### 4.2.3 Selection

The research project selection procedure will take place in two phases: a scientific evaluation, followed by a strategic choice. The scientific evaluation is performed by foreign scientific experts qualified in the research areas of the submitted proposals. The strategic choice is made between the scientifically best-ranked and best-grounded projects.

# 4.3 Contractual Obligations

#### 4.3.1 Contracts

For the selected proposals a contract is drawn up between BELSPO and the network of funded teams.

For this, the submitters of the proposal will be asked at the end of the evaluation and selection procedure to concisely formulate the specifications on the basis of which the contract is to be drawn up. This **technical annex** to the contract will be drawn up in consultation with BELSPO and will take into account the recommendations formulated by the foreign experts and the Programme Committee. Adaptations to the original proposal may relate to the content of the research, the composition of the network or Follow-up Committee, the choice of the coordinator, the proposals for valorising the research, etc.

BELSPO grant the selected projects the **funds required** for their implementation. BELSPO shall reimburse at most, and up to the amount specified in the granted budget, the real costs substantiated by the people responsible for the contract provided those costs are directly related to the implementation of the project.

#### 4.3.2 External evaluation

All research projects are subject to one or more external evaluations, whose modalities are specified in the research contract. These evaluations, conducted by foreign experts, concern the project's scientific quality (methodology and interim results) and strategic impact, in the light of its initial objectives. The evaluation will result in recommendations for the continuance (or discontinuance) of the project.

#### 4.3.3 Reports

The contract will define the various reports to be submitted to BELSPO. These reports are to be included in the project work plan and the cost of preparing them (including translations) is to be covered by the project budget.

#### 4.3.4 Data, Results, and Ownership





Foreground shall be the property of the Institution carrying out the work generating that foreground, as mentionned in article 13.2 of the general conditions of the contract (annexe 2).

For the research areas North Sea, Biodiversity and Antarctic, the researchers must bear in mind that the analysis and measurement data will nevertheless be transferred to specific data banks like IDOD/BMDC (http://www.mumm.ac.be/datacentre), AMD (Antarctic Master Directory (http://gcmd.gsfc.nasa.gov/KeywordSearch/Home.do?Portal = amd&MetadataType = 0), data bank BIOBEL from the Biodiversity platform (http://www.biodiversity.be).





# 5. <u>CONTACT INFORMATION</u>

All additional information can be obtained at the following telephone numbers and e-mail addresses:

Secretariat + 32 (0)2 238 37 61 secretariat\_SSD@belspo.be

Contact persons Mrs Maaike Vancauwenberghe, + 32 (0)2 238 36 78 vcau@belspo.be

Mrs Christine Mathieu, + 32 (0)2 238 34 93 math@belspo.be