



First ASPERA Common Call for Proposals

Introduction

ASPERA is a network of national government agencies responsible for coordinating and funding national research efforts in Astroparticle Physics. It is funded within the ERA-NET 6th Framework Programme of the EU and ASPERA started in July 2006. The objectives of ASPERA are to improve the coherence and coordination of Astroparticle Physics research within Europe including *inter alia* coordinating funding, where appropriate, in selected Research and Technology Development domains.

This call is the first of a series of common calls for R&D and design studies for the realisation of future Astroparticle infrastructures identified in the [ASPERA Roadmap](#) and is targetted towards **the Cherenkov Telescope Array for very high energy gamma ray astrophysics and direct dark matter searches**. The duration of the funding period for successful proposals shall be up to 3 years. Further calls planned for late 2010 and late 2011 under the auspices of the ASPERA-2 ERA-NET will address R&D and design studies for other future infrastructures in the ASPERA roadmap. The themes of future calls, and national funding agencies that will participate in these calls, will be agreed at a later date.

Therefore under the umbrella of ASPERA the:

- *Bundesministerium für Bildung und Forschung (BMBF, Germany);*
- *Centre National de la Recherche Scientifique - Institut National de Physique Nucléaire et de Physique des Particules (CNRS-IN2P3, France);*
- *Commissariat à l'Énergie atomique (CEA, France);*
- *Fonds National Suisse de la Recherche Scientifique (FNS, Switzerland);*
- *Istituto Nazionale di Fisica Nucleare (INFN, Italy);*
- *Ministerio de Ciencia e Innovación (MICINN, Spain);*
- *Narodowe Centrum Badań i Rozwoju (NCBiR, Poland);*
- *Stichting voor Fundamenteel Onderzoek der Materie (FOM, The Netherlands);*
- *Science and Technology Facilities Council (STFC, United Kingdom);*

are signatories (hereafter called Partner or Partners to an agreement) to open the first common call for proposals for transnational research projects for

Targeted R&D and design studies in view of the realisation of future Astroparticle infrastructures

The call will open on the 2nd April 2009 and the **deadline for the receipt of proposals will be 4pm CET on 4th June 2009**.

You are cordially invited to participate in this call.

Nature, Purpose and Theme of the Call

The projects eligible for funding within this common action should aim at design study activities or targeted R&D in view of the realisation of the infrastructures described in the document “Astroparticle Physics a European Strategy”¹. In particular they should convincingly demonstrate that they are integral parts of the formulation of a Technical Design Report linked to the future infrastructures in the following themes:

- Cherenkov Telescope Array for very high energy gamma ray astrophysics
- Direct dark matter searches

In order to realise these planned infrastructures considerable work will need to be undertaken on the specific technologies required for the increased size, greater sensitivity and higher performance of these next-generation facilities and the detailed design of these infrastructures. Examples of possible R&D topics for this call are described in the ASPERA document “R&D for Astroparticle Physics”² such as:

- Photodetectors for HEAP and large underground detectors
- Cryodetectors
- Distributed electronic and acquisition systems for Astroparticle Physics
- Fast and low-cost front-end read-out systems for Astroparticle Physics
- Noble liquids for dark matter
- Gas TPC technology R&D

Furthermore, the development of data reduction tools including necessary theory and modelling that is tightly linked to the above mentioned infrastructures can be integral part of eligible proposals.

Proposals should demonstrate a clear added value to the applicants’ partnership over and above what could be achieved individually. Genuine transnational collaborations should comprise complementarities of expertise and methodology among partners. Parallel national projects with little interaction are not acceptable.

Eligibility of Proponents and Composition of Project Teams

All researchers based in the Partner countries listed in the introduction, who are eligible to apply for national project funding according to the national regulations of the countries in which they are based, will be eligible to apply to this call. Applicants must belong to eligible organisations legally established in the Partner countries funding the call and must perform their planned activities within such organisations. Funding for industrial applicants may also be permitted by some national agencies, however it will not be possible for members of industrial organisations to function as Project Coordinator. Applicants from non-participating countries or non-eligible organisations may join these project consortia, and by joining strengthen a proposal, but they will not be eligible for funding via this Common Call and would not count towards the minimum of three participating countries (see below). Potential

¹ http://www.aspera-eu.org/images/stories/roadmap/aspera_roadmap.pdf

² <http://www.aspera-eu.org/images/stories/files/rd.pdf>

applicants should consult their National Contacts for the country they are working in for more details.

The funding applications must be made by individuals (not organisations).

Proposals must not duplicate research already funded at national or EU level within national, international or EU calls. It will be the responsibility of each project applicant to establish and declare that the submitted proposal fulfils this condition; such declarations will be subject to verification. Discovery of duplication will lead to the withdrawal of funding from approved projects.

Applicants for funding must form project consortia in which a minimum of three members from a minimum of three participating countries will participate.

The consortia will consist of a principal proponent (Project Coordinator) and consortia members (co-applicants). The Project Coordinators will be responsible for preparing all necessary documents for the application process and for handling the communication with the Common Call Secretariat and with his/her own national funding agency. The other team members (co-applicants) will be responsible for communication with their country's own national funding agency.

In some countries there may be specific rules or exclusions concerning permissible consortia constellations. Prospective applicants are strongly advised to consult their National Contacts for the country in which they are working for more details.

Funding Model, Eligible Costs and the Duration of Projects

The call will use the so-called “virtual pot” model in which each Partner funding agency will fund its “own” share of a particular project according to the rules and regulations usually employed when financing their national projects.

In total up to €3.7M of funding will be provided by the Partner agencies for highly-rated transnational projects. The maximum contributions of individual national funding agencies to the “virtual pot” (and thus the maximum that can be applied for from that national agency by researchers) are listed in Annex 1. There will be no funding from the European Union.

The budget of each partner in a consortium cannot exceed the limit fixed by the national funding agency unless supplemented by a contribution from industry or other funding source. Such contributions have to be approved by all the funding agency Partners participating in the project and by the Programme Committee.

Eligible costs are defined by the rules of the participating national agencies. Overheads and Value-Added Tax (VAT) will be handled according to the usual national rules for that Partner. The total available budget for projects submitted from a particular country will be fixed by that country's national funding agency.

Country-specific information concerning funding agency limits, rules and regulations can be sought via the National Contacts.

As a rule, funding for a national sub-project will normally cover costs such as those for:

- PhD student or Post Doc position for the duration of the project;
- travel expenses for the person(s) under contract and other staff that are active in the project (according to the rules of the National Funding Agencies);
- project related equipment/consumables.

All personnel, equipment and consumables need to be fully justified and cost effective.

The duration of the funding for the successful proposals under this Common Call shall be up to 3 years, starting not earlier than October 2009.

Evaluation Criteria and Process

Proposals submitted to this call will be evaluated and ranked by the ASPERA Evaluation Committee (EC). The EC will comprise 5 to 10 high level scientists, from within Europe and outside, relevant to the themes of the call. The EC will also seek additional scientific opinion from external referees for each proposal and applicants will be given the opportunity to comment on these referees reports in terms of a rebuttal before the ranking process begins. Following completion of the refereeing stage, the Evaluation Committee will meet to consider the proposals submitted. Two members of the Evaluation Committee will be assigned to each proposal to act as rapporteurs. The rapporteurs will assess the proposal using the evaluation criteria and scoring system below based on the proposals submitted, the referee reports and rebuttals. The rapporteurs will present their conclusions to the Panel and initiate discussion of the proposal. The Panel will consider and rank them according to agreed criteria for assessment and weighting for each criterion to produce an overall score and grade (highly fundable, fundable and not fundable) for each proposal.

The criteria for assessment of the projects will include primary and secondary (or supporting) criteria. The primary criteria are related to the assessment of scientific excellence and strategic fit to the ApPEC/ASPERA Roadmap. Scoring highly against the primary criteria will be an absolute pre-requisite, without which an application will not be recommended for funding. The secondary criteria, largely associated with project management and the track record of the proponents, would be used to assess confidence that the project would have a successful outcome.

Criterion	Scope
Scientific Merit	Quality of the science in terms of originality, innovation and new understandings.
Strategic fit	How does the project align with the priorities identified in the ApPEC/ASPERA Roadmap?
International competitiveness	The project's scientific quality in relation to the global competition and its timeliness in respect to competing projects.
Track record of scientific groups	The ability of the proponents to carry out research based on past performance, international reputation and

involved	expertise.
Quality of project management	Does the project have a sound project plan and clear management structure and processes?
Technical readiness and risk	Will the project achieve its stated goals, deliver on time and within budget?
Potential for knowledge transfer and industrial engagement	Will the research, and any resulting technology developments be exploitable by other research areas and industry/commerce?
Added value through transnational cooperation	What project outputs can only be achieved through transnational cooperation?
Cost effectiveness	The cost of the resources requested in relation to the activities to be undertaken and to the proposed goals of the project.

7. Scoring scheme

7.1 Each of the above criteria would be scored using the following scheme:

- 4. Excellent – all relevant aspects successfully addressed;
- 3. Good – all relevant aspects are well addressed, though minor improvements are possible;
- 2. Fair - significant weaknesses that would need corrections, though proposal broadly addresses the criterion;
- 1. Poor - criterion addressed in a cursory and unsatisfactory manner, serious inherent weaknesses.

In addition to scoring each criterion, a weighting (in brackets) will also be assigned to differentiate between primary and secondary criteria e.g.

Primary criteria

- Scientific quality (5)
- Strategic fit (5)
- International competitiveness (5)

Secondary criteria

- Added value through transnational cooperation (4)
- Track record of scientific groups involved (4)
- Quality of project management (4)
- Technical readiness and risk (3)
- Cost effectiveness (4)
- Potential for Knowledge Transfer and industrial engagement (2)

The scoring and weighting will then be combined to give an overall score, which would put the proposal initially into one of three categories e.g. highly fundable, fundable and not fundable. This initial ranking will be confirmed or changed after

Committee discussion. However, projects failing to score excellent or good in all of the primary criteria will not be considered to be fundable.

The results of this exercise will then be considered by a Programme Committee of high-level representatives of the Partner funding agencies which will assign resources to the projects on the basis of the Evaluation Committee's recommendations and to achieve a coherent package of support according to funding available and the principle of a virtual common pot.

Application Procedure and Deadlines

Applicants must inform their relevant national agency, by 30th April 2009, of their intention to submit a proposal to this call.

In addition, in some countries, it may be necessary for applicants to send additional forms or hardcopy applications to the national funding agencies of those countries. This is so that financial, eligibility checks and approvals may be undertaken, but this will not include a scientific peer review process in addition to that conducted by the call Evaluation Committee. Potential applicants should consult with their National Contacts for more details of these requirements and where/how to send any additional information.

The application procedure will be as follows :

The Coordinator for each project should submit the proposal on behalf of all the applicants and this should consist of an application form plus a case for support, which can be submitted on line at <http://commoncall.aspera-eu.org/>. The partners' declaration must be signed by a duly authorised signatory in each of the applicants' organisations.

The case for support should include the following information:

- Project title and acronym
- Executive summary (max. 1000 characters)
- Background, rationale and a review of the state-of-the-art (max. 1 page);
- Objectives of the project (max. 1 page);
- Detailed description of the proposed research (max. 10 pages) including:
 - the scientific questions to be addressed and expected results;
 - justification of research approach;
 - added value of transnational collaboration;
 - scientific importance and urgency of the proposed research;
 - relationship to similar research being done at other locations;
 - relationship of proposed research to the expertise of team members.
- Project planning (max.10 pages), including:
 - time plan including milestones and deliverables;
 - structure of the project, including workpackages and management structure;
 - the role of each team member in the project including the time they will spend on the project;
 - potential risks and the risk mitigation plan;

- and a results dissemination plan.
- Financial planning, including:
 - detailed costs estimates (per year) for each partner (according to the accounting rules of their national funding agency);
 - the cost motivation and information concerning any co-funding.
- CV of the team members, including a description of the main domain of their research and a list of the 5 most relevant publications (max 2 pages per team member).

In order for the Evaluation Committee to compare the costs for staff, travel, equipment etc. applicants are required to separately identify the direct and indirect cost elements within any proposal and report how the indirect costs have been calculated according their funding agency's rules. Personnel should also be shown in units of FTE (as well as cost) to allow comparison of effort given the different salary levels in the partner countries. VAT should also be shown separately.

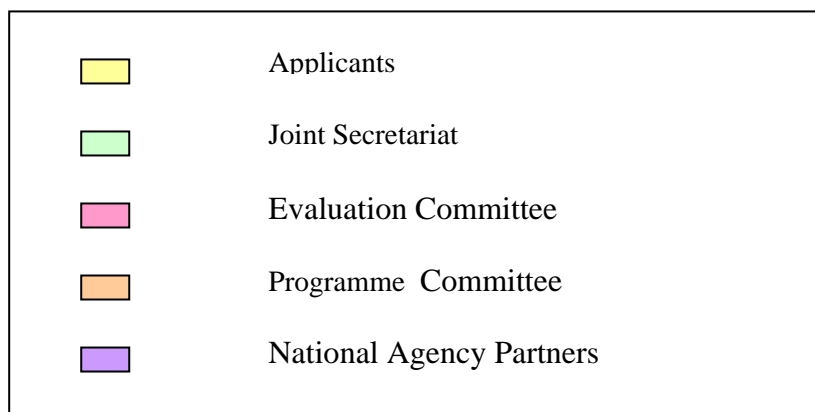
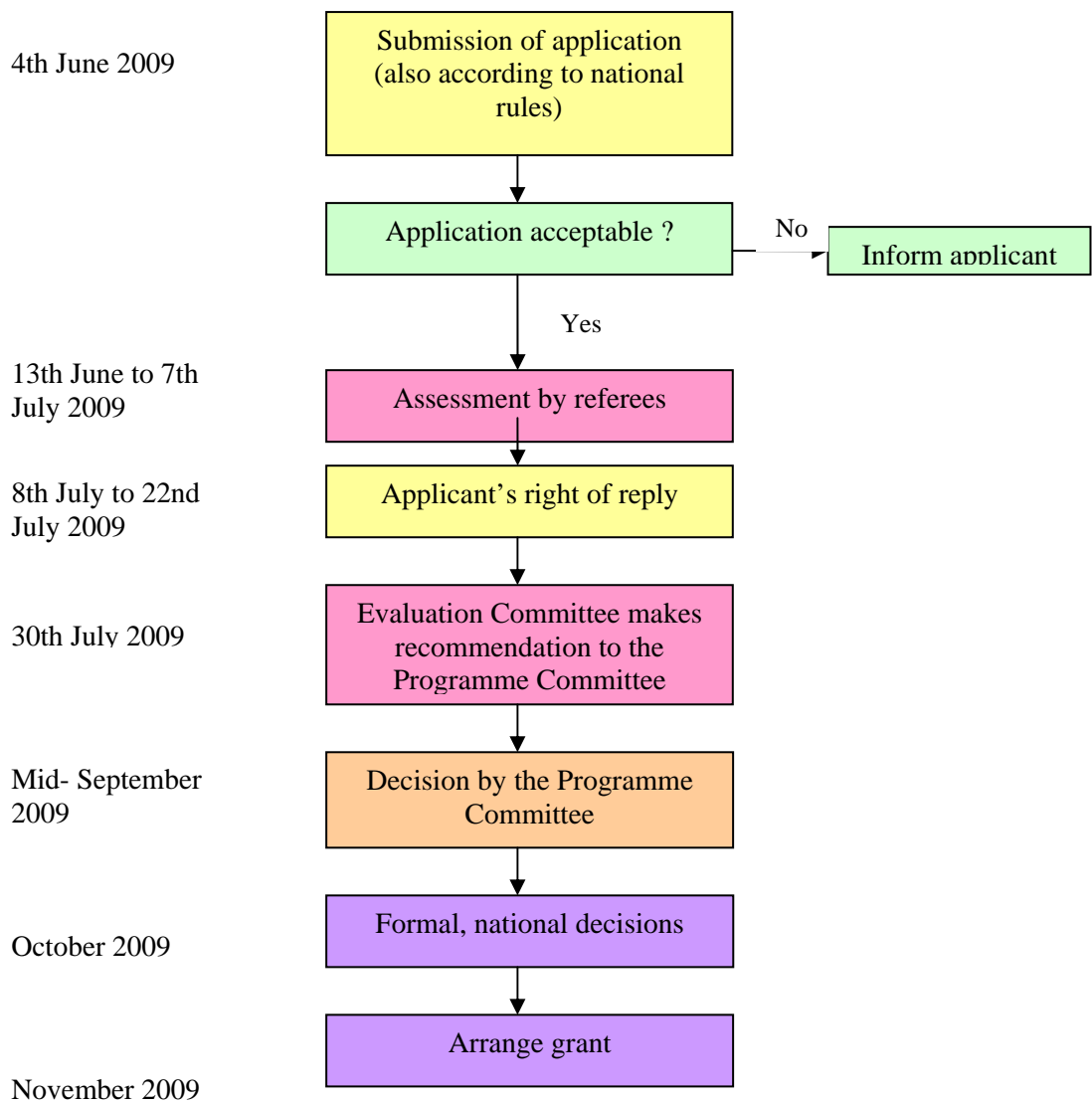
Proposals should then be submitted electronically via the Common Call [website](#). **The deadline is 4 pm CET on 4th June 2009.** In the event of any difficulties encountered in submitting their proposals, applicants are requested to contact the Common Call Secretariat (Deborah Miller, STFC or Emanuela Pistoia, INFN) immediately by one of the following.

E-mail: asperacall@stfc.ac.uk or Emanuela.Pistoia@Inf.infn.it

Telephone +44 1793 442004

Applications will only be accepted after the announcement of this call for proposals on 2nd April 2009 and must be received by the above deadline.

All proposals should be submitted in English.



Following a successful project application, project participants will be required to have signed a collaboration agreement and supplied proof of this agreement to the call Common Call Secretariat and the Partner national funding Agencies before project

funding will start. All consortia will also be expected to sign contracts with their national funding agencies according to the regulations of that country in which they are working.

In addition any to monitoring and final evaluation of sub-projects by the national agencies, successful projects will be required to provide regular (probably annual) progress reports at the project level to the Evaluation Committee and also to produce a final report.

National Contacts

Individual consortium members should inform their relevant national contact below by 30th April 2009 of their intention to submit a proposal to this call. Please also use the contacts below for any queries relating the national funding, rules and regulations and any requirement for a parallel submission to the national agency. A link is also provided, where available, to the relevant website for further information.

Partner Country	Agency	Contact	Website
France	CNRS-IN2P3	Stavros Katsanevas katsan@admin.in2p3.fr	
	CEA	bijan.saghai@cea.fr	
Germany	BMBF	Franz-Josef Zickgraf Franz-josef.zickgraf@desy.de Marc Hempel Marc.hempel@desy.de	http://pt.desy.de
Italy	INFN	Emanuela Pistoia Emanuela.Pistoia@Inf.infn.it	
The Netherlands	FOM	Rob van der Meer robvdm@nikhef.nl	English Dutch
Poland	NCBiR	Maria Bojanowska m.bojanowska@ncbir.gov.pl	www.ncbir.gov.pl
Spain	MICINN	antoni.ferrer@uv.es	
Switzerland	FNS	Bernard.Revaz@unige.ch	
United Kingdom	STFC	deborah.miller@stfc.ac.uk	http://www.scitech.ac.uk/rgh/

National contributions to the virtual common pot

The total amounts for the entire funding period up to which national funding is possible are as follows:

BMBF: 600,000 €

CEA: 200,000 €(1 post-doc plus related travel & accommodation expenses)

CNRS-IN2P3: 500,000 €(3 post-docs plus related travel & accommodation expenses)

INFN: 200,000 €³

MICINN: 600,000 €

NCBiR: 500,000 €

FOM: 150,000 €(1 post-doc)

SNF: approximately 450,000 €(2 post-docs)

STFC: 500,000 £

³ This amount is intended for projects on Direct Dark Matter searches only.