

ASTROPARTICLE PHYSICS INTERNATIONAL FORUM

This is an informal advisory note approved by the members of APIF in October 2013. It should be considered alongside formal application procedures and requirements of funding agencies. Nothing in this note should be taken to supersede or overrule formal requirements of funding agencies.

Guide/checklist for proposers of new major projects in particle astrophysics

1. APIF considered that it was appropriate to provide a checklist of issues that project proposers should address in the establishment of their project plans, governance and management. This should ensure that the relevant issues are being addressed by projects in a timely manner and make consideration by funding agencies easier. Successful implementation of these plans would also maximise the ability of project construction to be completed successfully, on time and within budget, and ensure appropriate data exploitation and management.

2. Project proposers are encouraged to consult the following reports for guidance:

The OECD Report on Establishing Large International Research Infrastructures: Issues and Options (2010), (<http://www.oecd.org/science/sci-tech/47057832.pdf>) ;

The EU report on Cost control and management issues of global research infrastructures (http://ec.europa.eu/research/infrastructures/pdf/cost_control.pdf) ,

The APPEC report entitled 'Proposal for the Synchronisation of Planning and implementation of European Large Astroparticle Infrastructures'
http://www.appec.org/images/Documents/Fact_Sheets/Synchronisation_ApP_Projects.pdf

The 'Assessment Expert Group Report on ESFRI Projects'
<http://ec.europa.eu/research/infrastructures/pdf/jd-final-aegreport-23sept13.pdf>

The OECD report on 'International distributed research infrastructures: Issues and Options, .
<http://www.oecd.org/sti/sci-tech/international-distributed-research-infrastructure.pdf>

3. In the preparation of these reports consideration was given to the essential elements which need to be taken into account in the planning phase of large scale infrastructures. They compare the approaches taken on this issue by major projects in Europe and global projects with significant European participation. In so doing they have identified key management issues for cost and schedule control, and drew lessons from present and past experience.
4. Building on this past work, APIF sets out below the issues that it would expect project proposers to address during the various stages of a project. It is not expected that there is a unique or prescribed 'answer' to these issues, but these issues must be addressed in planning, and normally before funding agencies would be expected to commit significant funds.

Phase A: – Conceptualisation/Preparatory Phase

Science case and alignment with global and/or regional strategies.

Identification of potential user community.

Governance and oversight of this phase (internal to the project and from funding agencies)

Scientific advisory structure

Requirement for central project management effort and organisation.

Coordination and funding plan for R&D between partners.

Links with industrial suppliers.

Process for CDRs and TDRs.

Process for site selection (if relevant).

Broad costing basis for construction phase

Risk management

Ethical issues

Phase B: – Construction

Governance and oversight of this phase (internal to the project and from funding agencies)

Requirement for central project management effort and organisation.

Scientific advisory structure

Coordination of funding and responsibilities between partners.

Detailed cost estimates for construction and operation

Legal vehicles required.

Project management organisation and deliverables

Procurement and IPR strategy

Process for ensuring funding and sustainability of operations phase.

Risk management

Ethical issues

Phase C: - Operations

Governance and oversight of this phase (internal to the project and from funding agencies)

Commissioning activities and operational readiness review

Legal vehicles required, data access and management plans

Cost sharing model

Publication policy

Scientific advisory structure

Risk management

Ethical issues

Phase F: - Decommissioning

Planning to be incorporated into construction approvals