EUROfusion Consortium

ANNUAL WORK PLAN 2015

for the implementation of the fusion roadmap

Work Package Enabling Research

Call for Projects

Call Issued on 6th June 2014

Deadline for Responses: 15th July 2014

This Call for Projects aims at implementing elements of the Annual Work Plan 2015 for the implementation of the fusion roadmap on Enabling Research

Introduction and Programmatic Background

The Proposal for the implementation of the fusion roadmap in 2014-2018 includes, in addition to the mission oriented work, a programme aimed at promoting fundamental understanding and longer perspective research. The Enabling Research component of the programme is meant to address several areas in which fundamental understanding is required to advance fusion research. Only topics with relevance for fusion research will be funded. Keep-in-Touch activities to laser fusion research qualify, but limited to a maximum percentage of about 10% of the total funding available.

As a result of the Enabling Research call in 2013, the STAC has drafted a document (Lessons Learned during the STAC evaluation of Enabling Research Proposals for year 2014) that has resulted in several changes and improvements in the underlying call.

The electronic ECoM platform will be expanded such that it will not only be used for proposal submission, but also to guide the refereeing process as well as to communicate the final results of the call. Due to the fact that some time is needed for this expansion, ECoM will be opened on the 16th of June.

In this Call for projects, the Beneficiaries are invited to submit proposals for research projects aiming at implementing the Enabling Research component of the Annual Work Plan 2015.

Eligibility Criteria

Proposals must be submitted by the GA members¹. Only complete proposals, **related to fusion research**, and submitted within the deadline are eligible. Enabling Research activities involving devices funded under the Campaign oriented approach will have to be incorporated into the respective Work Package.

For joint proposals, involving more than one Beneficiary, the Principal Investigator is responsible for obtaining the agreement from the respective GA member(s) regarding the joint content of the proposal. In particular, for proposals making use of experimental facilities, the Principal Investigator should have the agreement of the respective GA members regarding the proposed

¹ Wherever we mention GA member in this document we refer to the person in the Member Institute who is officially giving approval for the submission into ECoM via the high-level user account (within the EFDA system the Head of Research Unit was standard)

experiments. Operational costs of facilities required for the work are not reimbursed by EUROfusion.

The Principal Investigator should as a rule devote at least 50% of his time (0.5 ppy) to the project; for the collaborators a minimum of 0.2 ppy per person is required. To prevent all the Principal Investigators requesting salary information about their collaborators from the various beneficiaries at this stage, it is proposed to fill out this information afterwards only for those proposals that have a high probability of being granted. After STAC – who will make the ranking and selection of proposals – has made the ranking list, a request will be sent out to obtain the actual salary information. As a guideline for estimating the total amount of manpower: the average European salary of all people involved in EUROfusion activities at this moment is 72 k€p.p.p.y.

The duration of the projects is limited to three years; proposals with a shorter duration of only one or two years can also be submitted. The maximum volume of proposals is limited to 0.5 M€yr.

Selection Criteria and Evaluation Process

After a screening of the proposals by the EUROfusion Programme Manager on the basis of the eligibility criteria, the proposals will be evaluated by a panel of external (European and/or non-European) referees that will be proposed by the EUROfusion STAC. All proponents will be given the opportunity to write a reaction to the referee comments. Although the time for this interaction is limited to a single week, proponents will be informed well enough in advance such that they can prepare for this. The selection of the proposals will be done by STAC, which can make use of additional experts if needed. The selection by STAC is done on the basis of the proposals, the referee reports and the comments to referee reports by the proponents.

Proposals will be evaluated and selected according to the scientific merit of the proposals taking into account the following criteria:

- a) Curriculum Vitae and Track Record of the Principal Investigator and participants in the project, and their commitment to the proposal (20 points);
- b) Emphasis on addressing important challenges in fusion research (20 points);
- c) Scientific excellence, innovation potential, including theoretical aspects; going beyond the state of the art (30 points);
- d) Adequateness of the resources and time to meet the proposed goals (20 points);
- e) Value of the collaboration aspects in the proposal (synergy, complementarity) (10 points);
- f) In the special category of IFE proposals: criteria b) will be replaced by: commonality of issues with magnetic fusion (reactor issues, alpha and neutron effects, etc.) (20 points)

The proposals will be ranked taking into account the evaluation criteria, and the outcome of the evaluation process will select proposals:

- Rated A: to be funded within available funds,
- Rated B: not to be funded under the present Call "not selected", but submission in subsequent Calls allowed; these proposals could be also carried under the Complementary Research;
- Rated C: not selected, no resubmission possible.
- Rated D: out of scope

No detailed feedback will be given afterwards about the selection as the referee comments will in most cases already be informative.

Resources and Funding Rate

All financial provisions indicated in this call are subject to the approval of the grant proposal by the European Commission and to the signature of the Grant Agreement.

The Consortium reimbursement rate for projects in the area of Enabling Research will be:

Manpower	50%
Hardware investments directly related to the project	40%
Consumables, other goods and services, operational costs of facilities	0%
Mission costs related to the project, in accordance with the Consortium rules	100%

As a general guideline the costs for missions will be in the order of 5% of the total volume of the proposal. In case significantly less or more funding is requested for missions, argumentation for this deviation should be included in the proposal. Individual missions are approved by the Principal Investigator on a case-to-case basis up to the agreed ceiling. The indicative total maximum community contribution (EC) will be 13 M€

Eligible Manpower costs are those directly related to the scientific and technical work carried out in the frame of the project. The name of each collaborator should be indicated in the appropriate field with the time dedicated to the project accompanied by a one-page CV summary. If one of the collaborators is yet to be recruited, such as an open postdoc / PhD position to be filled for the execution of the project, the name of the collaborator should be replaced by "Open position" and the CV should be replaced by the job description.

As mentioned under the eligibility criteria, no detailed salary information is needed throughout the application, evaluation and selection phase in order to make the whole process administratively as lean as possible. For the proposals that will be ultimately granted the actual salary rates for each investigator need to be used. After STAC has made the final ranking of the proposal, the detailed salary information will be requested for only those investigators involved in proposals that have a high chance of being granted.

Eligible hardware costs are hardware investment costs directly related to the project. These should be described in detail in the proposal.

Costs related to experimental time in facilities will not be funded under this Call. Proposals requiring experimental time at JET must be submitted under the JET programme. Experimental time in national facilities must be allocated within the national programme of the facility.

Proposal

The proposal should contain a description of the work to be carried out, including an introduction with the motivations and all the required background with appropriate references. The novelty of the work should be emphasised in the description, with the objectives clearly presented together with the scientific and technical deliverables and milestones. The resources foreseen for the execution of the project should be detailed, including the manpower by listing the principal investigator and all participants in the project, respective affiliations and time dedicated to the project (ppy). The list of participants in the project should be accompanied by a description of their competences and their involvement in the project execution. A detailed description of the related hardware investments and use of missions should be provided. For joint proposals, involving more than one beneficiary, the principal investigator is responsible for obtaining the agreement from the respective GA member(s) regarding the joint content of the proposal. In particular, for proposals making use of experimental facilities, the principal investigator should have the agreement of the respective GA member regarding the proposed experiments.

Scientific Monitoring and Reporting

A final report on the outcome of the project, outlining the main results should be submitted at the end of the project. Intermediate reporting is required for multi-annual projects as part of the project monitoring. This report could be used in the evaluation of subsequent applications for the continuation or extension of the project. Granted Enabling Research proposals with a duration of three years are subject to a midterm evaluation after 1.5 year.

Submission

The proposals must be submitted by 15th July 2014. Successful projects will be implemented starting from 1st January 2015.

Important Dates and Timeline

6 June 2014	Call issued
15 July 2014	Deadline for Proposals
30 July 2014	Proposals to be sent to external reviewers
12 September 2014	Deadline for reviewers to submit their report
15 September 2014	Referee comments collected by the PMU and uploaded on
	ECoM. (Proponents will be informed beforehand that they are
	expected to comment in this specific week)
22 September 2014	Deadline for reactions to referee comments by proponents (to be
	uploaded on ECoM by the proponents).
24 October 2014	Finalization of STAC selection (IAEA conference in the week 13-
	17 Oct)
5 November 2014	PMU to finalize the financial table
13 November 2014	Approval of the ER proposals by the General Assembly
1 January 2015	Start date of the projects

Proposal for an Enabling Research Project for the implementation of the fusion roadmap

Enabling Research Call Template

Project Title	Field in ECOM

Abstract

Field in ECOM (150 - 300 words)

Category

Field in ECOM

Principal Investigator (PI):

Name of PI:	Field in ECOM
Beneficiary:	Field in ECOM
Email:	Field in ECOM
Phone	Field in ECOM
Dedication to the Project	Field in ECOM
(Manpower) (ppy) minimum	
0.5 ppy	
Manpower Cost	Field in ECOM
(kEuro/ppy)*	
Hardware Investment:	Field in ECOM
(kEuro) (if applicable)	
Mission Cost:	Field in ECOM
(kEuro) (if applicable)	
Curriculum Vitae	Upload file in ECOM (Max 1 page)

^{*} This information can be inserted afterwards for only those proposals that have a high probability of being granted

Collaborator(s):

Name of Collaborator:	Field in ECOM
Beneficiary:	Field in ECOM
Email:	Field in ECOM
Phone	Field in ECOM
Dedication to the Project	Field in ECOM
(ppy) minimum 0.2 ppy	
Manpower Cost	Field in ECOM
(kEuro/ppy)*	
Hardware Investment:	Field in ECOM
(kEuro) (if applicable)	
Mission Cost:	Field in ECOM
(kEuro) (if applicable)	
Curriculum Vitae	Upload file in ECOM (Max 1 page)

^{*} This information can be inserted afterwards for only those proposals that have a high probability of being granted

Please duplicate this table if necessary.

Proposal Description Template (Upload file in ECOM)

Introduction and Background:

1-2 Pages; the proposal should contain a well motivated description of the work to be carried out, including an introduction with all the required background and appropriate references.

Objectives:

1 Page: the objectives should be clearly presented and consistent with the scientific and technical deliverables and milestones.

Description:

Max 5 Pages; the novelty of the work should be emphasised in the description. The project should link to previous work, but should be self-contained and coherent. It should not be described purely as further investigation of a previous topic, but contain a clear strategy on how to advance the topic and make progress on the subject. If appropriate, the related Hardware investments should be described, together with the use of resources for missions.

Scientific and technical deliverables:

1 Page; the scientific and technical deliverable should be introduced here. These might include a theoretical model, a specific calculation or measurement, design of a component etc ... Please note that the final report, publications and presentations to conferences are not scientific deliverables.

Budget and Resources:

Summary of the resources required for the execution of the project including manpower, hardware costs and costs related to missions.

Additional input regarding the proposal refereeing (optional):

Indicate the names of people that you <u>do not</u> wish to be involved in refereeing the proposal.