SUPERGEN Marine challenge call

Accelerating the deployment of Marine energy (Wave and Tidal)

Summary

Proposals are invited for collaborative research proposals for fundamental research that will overcome barriers to Marine energy deployment. The remit of this call will be those aspects of marine energy generation technologies, the environmental impacts of the technologies and the socioeconomic aspects of marine energy (including policy) that are holding back the deployment of marine energy and that were highlighted by the scoping workshop in March 2011. There should be a single submission with a single PI. The Institutions involved in the successful application(s) will be expected to become part of the core SUPERGEN Marine Hub.

The call closes at 4pm on the 12^{th} July 2011. Up to £3M is available for this call and up to three proposals only will be funded. The duration of the grant(s) will be up to three years.

Anyone intending to submit a proposal to this call must register their interest by email to neil.bateman@epsrc.ac.uk by the 3^{rd} June 2011, including in the email the project partners, names of the PI and any Cols, the subject area and an approximate value of funds to be requested. Please note that this is not intended to restrict the final submission as changes will be allowed, but will give us an indication of the level of interest and enable the quick identification of reviewers. Applicants that do not register their intent will have their applications rejected.

Background

As a technology Marine energy is developing to the stage where many devices are being tested at experimental facilities such as the Wave Hub or EMEC. There are an increasing number of development research initiatives from organisations like the ETI, TSB and Carbon Trust that are creating momentum in the sector. This call was conceived in discussions with these development funding organisations in order to address some of the fundamental research issues that are being identified that are preventing the rapid progress of the development process.

This challenge call invites applications for research projects that address the fundamental research issues that are holding back the deployment of marine energy. The remit of this call was defined at a scoping workshop that was held in March 2011. The workshop outputs can be seen in the ‘output
from the Marine Workshop’ document that can be found on the same site as this call document.
Please note that not all of the findings that came out of the workshop are within the remit of the call as they cover issues that are outside the remit of the Research Councils. They are captured for the purposes of informing ETI and TSB and other interested parties of the key issues.

Remit of the call

- Large scale Interactive coupled 3D modelling for wave and tidal energy resource and environmental impact.
- Technology for device and environmental monitoring
- Understanding extreme loading events and impact on devices and arrays.

The detail behind the three remit areas listed above can be found in the scoping workshop output paper also published on the call site. The scoping workshop document includes specific worked up challenges, these should not be seen as being prescriptive and are intended as a guide only.

The SUPERGEN Marine Hub

The successful project(s) will be expected to become part of the existing SUPERGEN Hub. The Hub’s role is threefold;

1/ to provide a networking activity that brings the Marine research community together. This includes Scientists and Engineers working in all aspects of Marine energy from the devices to environmental researchers and Industrialists. The Hub will seek to bring together the community in order to help inform the research agenda as deployment progresses.

2/ to provide leadership to the community, and, with the community:
   - Maintain and evolve the sector landscape and roadmaps.
   - Help co-ordinate the research direction as defined by the roadmaps
   - Facilitate the research undertaken by assisting in seeking funding from the appropriate source.

3/ to provide a ‘baseline’ of core academic research that maintains capability.

For further information on the operation of the SUPERGEN Marine Hub please contact Professor Robin Wallace (PI), University of Edinburgh robin.wallace@ed.ac.uk

Call criteria

For an application to be considered it must fulfil the following criteria:

- Proposals must be within research council remit. Whilst this is an EPSRC led call proposal workpackages that are in other councils remits are acceptable as long as they do not comprise the majority of the research being proposed.
- The proposal must be multidisciplinary, see above bullet point.
• The proposal must be multi-institutional.
• Stand alone projects will not be considered. The proposers must be prepared to become part of the existing core SUPERGEN Marine Hub and accept their steering and management committee structure and requirements, applicants must state what discussions they have had with Robin Wallace in this regard.
• Proposals should not be device specific, any research should be generic. For example, applicable to any wave device or any tidal device.
• All proposals must define the existing research that is on-going in the area they are intending to work and clearly define why their proposal is different and complimentary. The UKERC landscape and research atlas gives details on what is currently being done and can be found at http://ukerc.rl.ac.uk/index.html. Further information on research that is currently being funded by the Research councils can be found on their web-sites. Proposals that duplicate existing research will be rejected.
• The application must define how the project will interact with existing research activity in this area.
• The proposal should define a public engagement/dialogue policy. Any activities in this area should include policy as well as general public engagement. Projects are encouraged to undertake public engagement but any engagement must be defined in the context of the public engagement/dialogue activities of the SUPERGEN Marine Hub. Again, applicants should discuss this with Robin Wallace.

Please note that in-line with current EPSRC policy project students may not be requested.

Eligibility

For information on the eligibility of organisations and individuals to receive EPSRC funding, see the EPSRC Funding Guide: http://www.epsrc.ac.uk/funding/apprev/basics/Pages/fundingguide.aspx

As this call is a targeted funding opportunity provided by EPSRC, higher education institutions, and some research council institutes and independent research organisations are eligible to apply. A list of eligible organisations to apply to EPSRC is provided at: http://www.rcuk.ac.uk/research/Pages/Eligibilityforrcs.aspx

How to apply

You should prepare and submit your proposal using the Research Councils’ Joint electronic Submission (Je-S) System (https://je-s.rcuk.ac.uk/).

Full proposals should be submitted by 4pm 12th July 2011

When adding a new proposal, you should select:
• Council ‘EPSRC’
• Document type ‘Standard Proposal’
• Scheme ‘Standard’
• On the Project Details page you should select the ‘SUPERGEN Marine Challenge’ call.

Details of which research organisations have registered to use Je-S are available from [http://www.so.stfc.ac.uk/jes/jes1/RODetails(Web).pdf](http://www.so.stfc.ac.uk/jes/jes1/RODetails(Web).pdf).

Please note that clicking ‘submit document’ on your proposal form in Je-S initially submits the proposal to your host organisation’s administration, not to EPSRC. Please allow sufficient time for your organisation’s submission process between submitting your proposal to them and the call closing date. EPSRC must receive your application by 4 pm on 24/08/10.

Guidance on the types of support that may be sought and advice on the completion of the research proposal forms are given on the EPSRC website [http://www.epsrc.ac.uk/funding/apprev/preparing/Pages/default.aspx](http://www.epsrc.ac.uk/funding/apprev/preparing/Pages/default.aspx) which should be consulted when preparing all proposals.

**Guidance on writing proposals**

The proposal document should include the following.

**Case for support**

The case for support should be up to 10 pages in total, to include:

- Two- page track record, which should detail the relevant expertise that each investigator will bring to the research programme. For the Principal Investigator, there should be evidence of leadership and management skills.
- Six- page description of the proposed programme of research, and a brief statement of the research vision, and details of the methodology proposed in each research strand to achieve that vision.
- Two-page management description and how it will be part of the SUPERGEN Marine Hub management structure, to include:
  - Management structure, including day-to-day management strategy.
  - Details of external advice streams, including potential users of the technology
  - Monitoring strategy, including how the direction of the research programme will be assessed

**Pathways to Impact Plan**

Up to two pages. This document should describe who may benefit from the research, how they may benefit and what will be done to make sure they have the opportunity to benefit. More information on preparing the impact plan and more general information on economic impact can be found on our website at: [http://www.epsrc.ac.uk/funding/apprev/preparing/Pages/economicimpact.aspx](http://www.epsrc.ac.uk/funding/apprev/preparing/Pages/economicimpact.aspx)

**Justification of resources**

Up to two pages. This should be a narrative description of the need for the resources requested.
Workplan
Up to two pages. It is not expected that this will be a Gantt chart for the whole time of the project, but should include a comprehensive plan for the start of the project and then refer to the management strategy to give appropriate milestones for when important decisions on the direction will be taken.

Statements of support from collaborating Project Partners
A statement of support from Project Partners should be provided on headed notepaper with a date and signature from the named contact in the collaborating organisation. For advice on what these should contain see:
http://www.epsrc.ac.uk/funding/apprev/preparing/Pages/lettersofsupport.aspx

For advice on writing proposals see:
http://www.epsrc.ac.uk/funding/apprev/preparing/Pages/default.aspx

In addition to this the case for support should also include:

- One page description on how the project will integrate with the SUPERGEN Marine Hub
- One Page description of the networking activities that the project will undertake and how it relates/augments to the SUPERGEN Marine Hub activities.
- One Page description on how any IPR generated by the project will be handled and how it relates/augments to the SUPERGEN Marine Hub activities.
- Two page description of how this project fits into the broader marine energy research that is currently being done.

Please Note: when submitted through JeS this additional information should be included in the same attachment as the case for support.

Assessment process

Key Dates

<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
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<tbody>
<tr>
<td>Call for proposals Issued</td>
<td>10th May 2011</td>
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<tr>
<td>Applicants notify EPSRC of intent to submit a proposal</td>
<td>3rd June 2011</td>
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<tr>
<td>Deadline for Proposals</td>
<td>12th July 2011</td>
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<tr>
<td>Peer Review</td>
<td>July/August 2011</td>
</tr>
<tr>
<td>Interview panel</td>
<td>Mid September 2011</td>
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Proposals will be reviewed using postal refereeing. Applicants may be invited to an interview panel where they will be expected to present their proposal and respond to panel questions. Any interview
The panel will be comprised of independent UK and overseas stakeholders who will all have expertise in Marine energy. If there is to be an interview stage the applicants will be informed as soon as possible after the call closing deadline.

The panel will be asked to assess the proposals against the usual EPSRC assessment criteria as listed below. As such the fundamental nature of the challenge and the scientific quality of the proposal are critical, as well as the fit of the proposal to the call.

A rank ordered list will be generated and only the top ranked proposals will be funded.

Please note that if two proposals are received in the same research area EPSRC reserves the right to fund only the highest ranked of the proposals in order to avoid duplication of effort.

**Assessment criteria**

The proposals will be assessed on their fit to the scope of the call, and to the following standard criteria;

**Quality of the technology research**

- Research vision, ambition and adventure
- Distinctiveness from other projects funded from the existing portfolio
- Appropriateness of proposed methodology

**Potential impact of the project**

- Potential impact of the UK research landscape in cross-disciplinary technology research
- Appropriate and viable potential user collaborations
- Plans for dissemination and knowledge exchange with potential beneficiaries of the research

**Ability of the applicant team to deliver the research**

- The leadership quality and experience of the PI
- The track record of the team
- The balance of skills of the project team

**Resources and management, including**

- Effectiveness of planning and resource management
- Appropriateness of resources requested

**Guidance for reviewers**

Information about the EPSRC Peer review process and guidance for reviewers can be found at: [http://www.epsrc.ac.uk/funding/apprev/review/Pages/default.aspx](http://www.epsrc.ac.uk/funding/apprev/review/Pages/default.aspx)

**Additional Grant conditions**

The principal Investigator will be required to submit annual progress reports as part of the SUPERGEN Marine Hub reporting requirements.

The project may be reviewed as a part of the SUPERGEN Hub after 3 years.
The project must collect details of industrial collaborators and their contributions to the research and provide these figures both to the SUPERGEN Marine Hub and to the EPSRC on request.

For this call either a collaboration agreement with the SUPERGEN Marine Hub, or an amended version of the SUPERGEN Marine Hub collaboration agreement with the successful applicant included is required.

The project must have a management committee, or equivalent body to oversee the day-to-day-running of the project. This management committee must work with, or be a part of and drawn from, the existing SUPERGEN Marine Hub management or steering committee.

Any grant is awarded on the understanding that, in addition to the core research programme, the project will work with the SUPERGEN Marine Hub to undertake a wider networking role with the research and user community outside the project membership.

The project will become a core member of the SUPERGEN Hub, attending all project meetings, providing regular project updates and reports, and engaging fully with the SUPERGEN Marine Hub management and steering committees. Failure to do so will result in the suspension of the grant.

**Contacts**

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