

## UK IODP

### Announcement of Opportunity: Site Survey Investigations (SSIs)

*Closing date for outline proposals: Tuesday 2<sup>nd</sup> September 2014*

*Closing date for full proposals: Tuesday 2<sup>nd</sup> December 2014*

*Please note that you will be unable to start any proposal in Je-S until June 2014*

To support UK membership in the International Ocean Discovery Program (IODP), NERC runs the UK IODP Research Programme to enable: (1) UK scientists to ensure that IODP carries out the best and highest priority science; (2) UK scientists to participate in and obtain material from drilling expeditions; and (3) UK scientists to capitalise on the results of IODP drilling and UK technologies, allowing them to benefit from technological advances in deep sea drilling.

The aim of this round of Site Survey Investigations is to maximise impact from the third phase of UK IODP (2013–2018) by enabling UK scientists to lead drilling proposals, and future IODP expeditions, through providing the marine geophysical data essential for the progress of IODP scientific proposals.

This Announcement of Opportunity requests outline proposals from the UK science community for Ship-borne Site Survey Investigations (SSIs) and 'Virtual' SSIs (desk-based SSIs using already collected geophysical data requiring no extra ship-time). Full proposals will be invited following outline proposal evaluation.

**Applications must be associated with an IODP drilling proposal that has a high level of UK involvement (e.g. UK Lead Proponent) and has already been submitted to IODP.**

The total funding available under this round is in the region of £2M (this being NERC's 80% contribution to full economic costs (FEC), and including indexation).

### Site Survey Investigations

The success of IODP depends on the development of excellent and innovative drilling proposals. To be successful a drilling proposal must have outstanding science objectives. However, it is also imperative that the geology of the proposed drill sites is sufficiently well known to demonstrate that the targets required to address the scientific objectives can be drilled and that drilling can be conducted safely. This requires detailed geophysical characterisation of the proposed sites that usually includes a minimum of crossing seismic reflection lines and a range of geology-specific additional observations.

UK IODP has allocated funding for SSIs for the collection/interpretation of geological data in support of UK-led drilling proposals. For further information on the IODP Science Programme and drilling proposals see the [International Ocean Discovery Program](#) and the [Site Survey Data Bank](#) websites. **Proponents should ensure they are familiar with the IODP site survey, environmental, and safety requirements.** It is essential that they plan their SSI proposals to ensure all aspects are addressed and the complete ranges of data required are collected. UK members of the IODP Science Evaluation Panel may be of assistance with these matters.

## **Proposals for Ship-borne Site Survey Investigations**

UK IODP has funds to support at least two ship-borne SSIs and if these surveys require NERC ship-time it is anticipated that the earliest that cruises will be programmed is in 2016/17 – but more likely 2017/18. Outline proposals are invited from the UK Science community for such SSIs. Proponents must have submitted a drilling proposal or pre-proposal to IODP before an award will be made by NERC, and funding will be wholly dependent on approval of the IODP drilling proposal. Applicants are strongly encouraged to explore international and/or industrial partnership opportunities to support the delivery of the SSIs and maximise synergies with relevant international projects and programmes.

### *Ship-time and Marine Equipment Applications*

Prior to submitting an outline proposal for a ship-borne SSI, applicants are required to discuss their plans with the NERC Marine Planning Officer ([Beth Woodward](#)) and the UK IODP Programme Manager ([Vicki Norton](#)). This should be done well ahead of submitting an application in order to discuss feasibility of a proposed cruise and superstructure costs. This is particularly important when considering a joint ship-time proposal with a partner organisation, such as the National Science Foundation or European partners. **A Ship-time and Marine Equipment (SME) form should then be completed via the [Marine Facilities Planning website](#) and past the 'Edit' stage before submitting an outline proposal.**

Cruise superstructure costs must be included in full proposals for ship-borne SSIs. These costs should be requested via NERC Marine Planning ([Beth Woodward](#)) by **2<sup>nd</sup> October 2014** and should be included in the main Je-S financial tables and explained in the Justification for Resources.

## **Proposals for 'Virtual' Site Survey Investigations**

UK IODP will also support 'virtual' SSIs. 'Virtual' SSIs can reduce the need for new ship-borne surveys of drilling sites. It is hoped that this approach will be a cost-effective way of rapidly enabling UK-based researchers to develop drilling proposals without the financial and time constraints of scheduling offshore fieldwork. UK IODP aims to strengthen its links with industry, particularly in data exploitation, mission goals and technology development, where there are joint objectives and mutually beneficial targets. In order to realise this goal, joint academia–industry proposals that use existing industrial or other seismic reflection data for 'virtual' SSIs are particularly encouraged. It is expected these would be worked up into a full IODP drilling proposal by an academic with the relevant expertise, in collaboration with appropriate representatives from industry, or with a group of representatives from companies who have made the data available and who are interested in the research outcomes. Detailed high-resolution imaging and/or 3D seismic data in support of SSIs can be very important to significantly enhance the scientific objectives of the drilling proposal and to ensure safe drilling.

It is envisaged that 'virtual' SSI funding will support a PDRA, or industrialist on secondment to a university, to work up the data under the direction of the Principal Investigator (PI) and in collaboration with the industrial partners. Applicants are free to determine how original contacts are made, industry–academia partnerships formed and ideas/proposals generated. UK IODP welcomes proposals for 'virtual' SSIs from existing or new academia–industry partnerships.

## **Data Management**

Data generated by NERC funded research are a valuable long-term, public-good resource. To ensure the data can be fully exploited in support of the activities that they were collected for, and to enable them to be available

for effective, longer-term, post-programme exploitation, it is NERC's policy that data must be managed effectively from the time of generation onwards (<http://www.nerc.ac.uk/research/sites/data/policy/>). **All full proposals are required to discuss data management needs with the appropriate NERC Designated Data Centre in advance of application and include provision for these needs in the proposal.** In particular, full proposals should consider the following points and take these into account in their data management plan (included as part of the Case for Support, and fully resourced).

- What data are planned for collection and which of these data are perceived as having long-term value? When is it estimated that these data will be made available to the data centres?
- What, if any, existing data will be required? Who will supply these data and will there be a cost?
- Which is the most appropriate of the NERC data centres to provide data management support and guidance during the programme, and what level of data management support is going to be required from the data centre?
- How will data collected as part of the programme be managed during the life of the programme?

It is particularly important to provide data in the required format for the designated data centre so that they can be easily stored. It is generally envisaged that projects will want to undertake this data conversion task for themselves and work plans should include the necessary data support needed in order to provide the data sets to the data centre in the correct format. If required, specialist assistance is available from NERC data centres to undertake the conversion task. However, applicants must negotiate the cost for this work with the data centre and build the cost for this work into their project.

### How to apply

The deadline date for submission of outline proposals is **2<sup>nd</sup> September 2014**, with invited full proposals required by **2<sup>nd</sup> December 2014**. The call for outline bids is open for an extended period to allow applicants to fully explore partnership opportunities.

All proposals should be submitted at full economic cost via the Research Councils' Joint electronic-Submission system (Je-S). The 'scheme' should be completed as 'Directed FEC' and the 'call' as 'UK IODP SSI Outlines' or 'UK IODP Phase3 DEC14', as appropriate.

See the [Je-S website](#) for information on the Je-S process. Further information, including details on Full Economic Costing, is also available in the [NERC Research Grants Handbook for Full Economic Cost Grants](#).

Potential applicants are reminded that they and their institution must be registered with Je-S in order to submit applications.

All attachments submitted through the Je-S system must be completed in single-spaced typescript of **minimum font size 11 point (Arial or equivalent)**, with margins of at least 2cm. References should also be at least 11 point font.

Note that on submission to Council ALL non PDF documents are converted to PDF and the use of non-standard fonts may result in errors or font conversion, which could affect the overall length of the document. Additionally where non-standard fonts are present, and even if the converted PDF document may look unaffected in the Je-S System, when it is imported into the Research Councils Grants System some information may be removed. We therefore recommend that where a document contains any non-standard fonts (scientific notation, diagrams etc.), the document should be converted to PDF prior to attaching it to the proposal.

### Outline proposals

For outline proposals the FEC outline proposal form should be used. At the outline proposal stage, only the lead institution should submit a form, which should summarise the applicants and resources required for all institutions in the collaborative proposal. A case for support of no more than 3 pages with a clear programme of work in addition to a CV for the PI should be attached.

NERC will inform individuals whether outlines are suitable for development as full proposals by 2<sup>nd</sup> October 2014. Full SSI proposals can only be submitted on invitation following approval of an outline proposal. Guidance will be provided to the successful outline applicants invited to submit full proposals. Feedback will be provided to unsuccessful applicants on request.

Potential applicants should note that information provided on the outline proposal form may be made available by NERC to other applicants to this UK IODP Round, where the outline proposal review panel request that full proposals involve mergers or other collaborations involving more than one proposal.

### Invited full proposals

For invited full proposals, the following should be submitted to NERC via the Je-S system (see [NERC Standard Grant guidelines](#)).

In addition to the standard Je-S pro forma, applicants will be expected to provide the following documents:

#### 1. Case for Support comprising of 2 parts

Part 1. **Previous Track Record** of the applicant(s), up to two sides of A4.

Part 2. **Description of the Proposed Research**, not exceeding eight sides of A4, to include:

- Underlying rationale and scientific issues to be addressed
- Specific objectives of the project, including their relevance to the Research Programme goals that will be addressed
- Methodology and approach
- Risks and mitigation strategies
- Programme and/or plan of research

#### 2. Justification of Resources, up to two sides of A4, submitted as a separate attachment in the Je-S system. It should include justification for all Directly Incurred Costs, Investigator effort, use of pool staff resources, any access to shared facilities and equipment, and capital costs. No justification for Directly Allocated Estates and Indirect Costs is required.

For all items of equipment costing over £10,000 (including VAT), but excluding those used for instrument development, the applicants of the proposal will need to:

- confirm that the piece of equipment is not readily available for use within the host institution, or any other accessible location (for instance by making reference to any asset registers consulted);
- provide evidence that all other reasonable options have been considered;
- if the equipment requested will replace existing equipment, explain what will happen to the existing equipment;

- explain the dependence of the project on this capital as well as any contingency plans that would be invoked should it not be possible to fund the capital elements of the proposal.

Additional information will be required for capital equipment costing more than £25,000 (quotations and involvement of RCUK procurement services) or £121,588 (full business case required); both cost thresholds include VAT. For details of these requirements see [http://www.rcuk.ac.uk/documents/publications/Equipment\\_Guidance.pdf](http://www.rcuk.ac.uk/documents/publications/Equipment_Guidance.pdf)

NERC will make best endeavours, but does not expect to be able to fund more than a small fraction of any capital equipment. In most cases, the maximum NERC support will be 50%, thus applicants will need to provide evidence of co-support for at least half of capital costs. Only in exceptional circumstances will NERC fund more than this, and applicants should discuss in advance with NERC any cases requiring such commitment, to receive feedback on whether it is worth proceeding with a proposal.

- 3. Pathways to Impact**, not exceeding two sides of A4. This should include an outline of:
  - those who may benefit or make use of the research;
  - how they might benefit and/or make use of the research; and
  - methods for disseminating data/knowledge/skills in the most effective and appropriate manner.
- 4. Letters of Support**, not exceeding two sides of A4 each. A Letter of Support is required from each named Project Partner. This letter should confirm that the support and facilities required to enable the associated collaborations will be made available. Letters of Support should not be submitted for organisations who are not named as project partners.
- 5. Data Management Plan**, up to one side of A4 as a separate attachment in the Je-S system. The outline data management plan should identify data sets likely to be made available to NERC Environmental Data Centres for archiving and re-use at the end of the grant (guidance available on <http://www.nerc.ac.uk/research/sites/data/policy/datapolicy-guidance.pdf>). It should also include a description of how the project will handle data generated within the project and prepare it for submission to the appropriate NERC Data Centre.

Each component proposal (including the lead) will additionally require the following attachments, where applicable:

- A **CV** of up to two sides of A4 for each named PI, Co-I, research staff post and visiting researcher;
- **Price quotations** for equipment costing more than £25k;
- Where applicable, a **Business Case** of up to two sides of A4 per item, for items of equipment above the OJEU threshold. Further guidance regarding capital costs can be found in the NERC [Grants Handbook](#);
- **Facility forms** (including aircraft). Ship-time and marine equipment (SME) applications must be approved by Marine Planning and moved past the 'Edit' stage ahead of submission of any associated grant proposals;

- Applicants wishing to use a NERC facility will need to submit a mandatory ‘technical assessment’ with their proposal (including aircraft, but excluding ships and HPC). For NERC, this means a quote for the work that the facility will provide. A full list of the Facilities requiring this quote can be found here: <http://www.nerc.ac.uk/research/sites/facilities/apply/facilities-requiring-technical-assessment.pdf> in the section NERC grant applications involving NERC facilities.

Please note that for joint applications the Previous Track Record, Description of Proposed Research and Justification of Resources should be common to all component parts of the application. Each attachment must not exceed the stipulated page limits regardless of the number of component Research Organisations.

Please note that on submission to council ALL non-PDF documents are converted to PDF; the use of non-standard fonts may result in errors or font conversion, which could affect the overall length of the document. Additionally, where non-standard fonts are present, and even if the converted PDF document may look unaffected in the Je-S System, when it is imported into the Research Councils Grants System some information may be removed. We therefore recommend that where a document contains any non-standard fonts (scientific notation, diagrams etc.), the document should be converted to PDF prior to attaching it to the proposal.

### **Assessment**

The final assessment and project ranking will be carried out by a specially convened expert assessment panel, which will meet in December 2014. PIs for any invited full proposals will be required to present to the panel, and answer any questions. Further guidance on this will be provided to PIs nearer the time.

The projects will be assessed via the following criteria:

- Are the scientific objectives sound and fully justified?
- Are the requested resources appropriate, and does the science team include all necessary expertise?
- Is the SSI related to an existing IODP drilling proposal with a high level of UK involvement?
- Have applicants considered the future IODP expedition schedule?
- Are synergies with (inter)national partners maximised. If not, how could they be improved?
- Will the resulting SSI produce high-level scientific outcomes (or potential results) as a stand-alone mission?

Standard NERC rules for institutional and investigator eligibility apply to all components of the call. For example, submissions must be made via UK universities or NERC-recognised bodies. For full proposals, an individual may only be a lead PI on one proposal, plus be involved in one further proposal as Co-Investigator (or be involved in two proposals as Co-Investigator). However, at the outline proposal stage, there will be no limit to the number of times an individual can be identified as a Co-Investigator, Recognised Researcher, or Project Partner. Linkages with research users and other non-academic organisations (as Project Partners) are encouraged.

The outcome of the assessment of full proposals should be known by the end of January 2015; 1 March 2015 is therefore the earliest start-date for projects (later if appointment processes are involved).

Scientific queries regarding this Announcement of Opportunity should be directed to the Science Coordinator, [Sean Burke](#) (0115 9363566).

Advice on application and administrative arrangements is available from the Programme Administrator, [Matthew Dobson](#) (01793 442584).

Any queries regarding the Je-S system and submission of applications should be directed to the dedicated [Je-S Helpdesk](#) (01793 444164).