

Making Sense from Data

Call type: Invitation for outlines

Closing date: 16:00 06 January 2015

Related themes: ICT, Mathematical sciences

Summary

The EPSRC Information and Communication Technologies (ICT) Theme is inviting outline proposals that explore how to make sense from data. The ability to extract meaning from data is becoming increasingly critical; new fundamental tools and techniques enabling better understanding, handling and communication of data will lead to a more efficient and effective information infrastructure.

This call is being issued as part of the 'Towards an Intelligent Information Infrastructure (TI3)' cross-ICT priority:

<http://www.epsrc.ac.uk/research/ourportfolio/themes/ict/introduction/ti3/>

Funds of up to £5 million are available, which is expected to support between four to six research projects, subject to the quality of the proposals received.

This call is being run in parallel with the 'User Interaction with ICT' call, which is being issued simultaneously by the ICT Theme.

Background

The need to communicate and store ever increasing amounts of data is putting a significant and ever increasing load on our information and communication infrastructure. The better we can make sense from the data we have, the more efficiently we can handle and communicate it.

This call addresses the strategy of the ICT Theme within EPSRC by aligning with the cross-ICT priority of Towards an Intelligent Information Infrastructure (TI3):

<http://www.epsrc.ac.uk/research/ourportfolio/themes/ict/introduction/ti3/>

'Extracting Understanding from Data' was one of the cross-cutting challenges identified at the TI3 workshop held in December 2012. More information can be found in the workshop report here:

<http://www.epsrc.ac.uk/newsevents/pubs/towards-and-intelligent-information-infrastructure-epsrc-workshop-report/>

This call builds on the findings from the workshop and subsequent discussions held by EPSRC around data analytics.

For more information about EPSRC's portfolio and strategies, see our website:
<http://www.epsrc.ac.uk/research/ourportfolio/>

Funding Available

Up to £5M of EPSRC funding is available through this call, and we expect to fund 4-6 proposals, subject to the quality of those received. The proposed research must be within the remit of EPSRC and the scope of this call. Proposals that are not will be rejected prior to peer review.

Scope of the call

Gaining value and making sense of the vast quantity of data collected in today's society is a complex problem that spans many areas of research in the ICT portfolio. Proposals that lie at the interface with ICT research and are relevant to the scope of this call, such as mathematics and other relevant disciplines, are also welcome.

We are looking for projects that explore how to make sense from data, by addressing high impact challenges such as:

- How to convert the vast amounts of data produced into understandable, actionable information
- How to efficiently and intelligently extract knowledge from heterogeneous, distributed data while retaining the context necessary for its interpretation
- How to ensure new techniques are realistic, compatible and scalable with real-world services and hardware systems

Applicants may apply to undertake any activity which can typically be sought through the standard research scheme including staff costs, travel and subsistence, visiting researchers, public engagement activities and equipment.

We ask that all applicants consider and capture aspects of responsible innovation in regard to data within the work packages. Moreover, applicants should address how anonymity can be safeguarded and how privacy can be preserved, where these issues are appropriate for the project.

Collaborations with industry or other users are not mandatory. However, such collaborations are strongly encouraged where greater impact can be achieved through such relationships. We also ask that applicants consider how they will engage with potential users of the research funded in the proposal. A strategy should be developed which covers:

- how and when potential users have been / will be identified;
- what form the engagement will take;
- what steps will be taken to ensure that outputs of the research are made available to potential users.

This strategy should be included within the Pathways to Impact section, and resources can be requested to support any associated activities.

Equipment

Where possible, researchers are asked to make use of existing facilities and equipment, including those hosted at other universities. If equipment is needed as part of the research proposal, applicants must follow EPSRC's rules for

requesting equipment over £10,000 in value. Individual items of equipment up to the current OJEC (Official Journal of the European Communities) procurement threshold can be included on research proposals submitted through this call, but research organisations will be expected to make a contribution to the cost. All requests for single items of equipment above the current OJEC threshold will need to go through a separate process which will assess the strategic need for the equipment and how to ensure maximum usage. These proposals will be assessed through the separate Strategic Equipment peer review process.

For more information on equipment funding, please see:

<http://www.epsrc.ac.uk/research/ourportfolio/themes/researchinfrastructure/subthemes/equipment/>

The current OJEC threshold can be found at:

<http://www.epsrc.ac.uk/research/facilities/equipment/process/>

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/howtoapply/fundingguide/>

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/funding/eligibilityforrcs/>

How to apply

Submitting application

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

When adding a new proposal, you should select:

Council 'EPSRC'

Document type 'Outline Proposal'

Scheme 'Outline'

On the Project Details page you should select the 'Making Sense from Data' call.

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 16:00 on 06 January 2015.

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/howtoapply/routes/>) which should be consulted when preparing all proposals.

Guidance on writing the outline application

Your outline proposal should consist of the Outline application form and Case for Support document.

- All proposals including multi-institutional bids must be submitted on one common Je-S proposal form by the lead organisation.

Outline application form - the summary section should contain an overview of the research proposed.

- All applicants must articulate how the proposed research addresses the scope of the call
- The outline will need to give an indication of the total funds sought should a full proposal be invited.

Outline Case for Support – no more than four pages of A4, addressing the key assessment criteria and giving an indication of the resources being requested and any project partners. The minimum acceptable font is size 11, and the minimum margin in all directions is 2cm.

- Applicants should give an overview of the project, clearly articulating the novel research being tackled, including a description of the approach and methodology being used and the team involved.

If the attachments are uploaded as Word documents, please be aware that once the application has been submitted to the Council/Funder, all the attachments will be converted and held as an Adobe Acrobat file (PDF). Also please note, that whilst we support a wide range, we do not support all MS Word font types. Therefore if an unsupported font type is used a different font type may be substituted which may result in changes to the layout of the document. For this reason we recommend that the documents are converted to PDF files before uploading.

Also, 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.

In addition, where non-standard fonts are present, and even though 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 is converted to PDF prior to attaching it to the proposal

For advice on writing proposals see:

<http://www.epsrc.ac.uk/funding/howtoapply/preparing/>

Full proposals

After short-listing the outline proposals, we will invite a number of applicants to prepare and submit full proposals. Multi-institutional projects should be submitted as a single proposal submitted by the lead organisation on behalf of all partners. Multi-institutional projects submitted as multiple forms will not be accepted, and will be returned without being peer reviewed.

The closing date for full proposals will be in mid June 2015. Invited applicants will be informed of the exact closing date following the outline panel meeting.

Full proposals will follow the submission guidance for standard EPSRC proposals. Documents that must be included are: Je-S proposal form, case for support, pathways to impact, justification of resources requested and a work plan.

CVs, statements of support from project partners, letters of support, technical assessments for the use of a major facility, and quotes for equipment should all be submitted only where appropriate.

Assessment

Assessment process

There are two stages in the assessment process:

1 - Outline Proposals

Postal peer review will not be used at this stage. A panel meeting will be held in March 2015 and this external peer review panel will short-list the outline proposals based on the information provided in the Je-S form and case for support. Selected applicants will be invited to submit full proposals.

2 - Full Proposals

The peer review process for standard mode proposals will be followed. Full proposals will initially be assessed by anonymous postal peer review against the standard research criteria. Those proposals which receive sufficiently supportive reviews will be evaluated by a further external peer review panel. This panel meeting will be held in September 2015 where proposals will be prioritised for funding.

Assessment criteria (for both outline and full proposals)

The assessment criteria for the Outline stage are:

- Fit to the scope of the call "Making Sense from Data"
- Quality of the research proposed
- Importance of the research proposed
- Appropriateness of the pathway to impact

In addition to the criteria above, full proposals will also be assessed against the following two criteria:

- Applicant(s) ability to deliver the research proposed
- Appropriateness of the resources and Management

Guidance

Guidance for reviewers

Postal peer reviewers will be directed to this call for proposals.

Information about the EPSRC peer review process and guidance for reviewers can be found at: <http://www.epsrc.ac.uk/funding/peerrev/review/>

Key dates

Activity	Date
Call opens in Je-S	28 October 2014
Closing date for outline proposals	06 January 2015
Short-listing panel	Mid March 2015
Closing date for full proposals	Mid June 2015
Assessment panel	Early September 2015

Contacts

For specific advice about this call please contact:

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Your research administration should be able to offer advice about costing your proposal and the Je-S system.

If there are any queries related to Je-S, please contact the Je-S helpdesk:
JeSHelp@rcuk.ac.uk or 01793 444164

Please allow enough time before the closing date for your organisation's submission process.

Change log

Name	Date	Version	Change
Miriam Dowle	23/10/14	1	N/A

Name	Date	Version	Change