IT as a Utility Call

Call for Expression of Interest for ITaaU Network Plus Pilot Studies

Closing date for EoI: 17:00 on 12th November 2012

Summary

Applicants are invited to apply for short-term pilot research study funding from the "IT as a Utility Network+", set up as a priority challenge area by the RCUK Digital Economy Theme (DE). These pilot studies will be no longer than 6 months in duration and are intended to test new ideas or create novel linkages between research areas.

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Background – Digital Economy Theme (DE)

The Research Councils UK Digital Economy Theme is supporting research to rapidly realise the transformational impact of digital technologies on aspects of community life, cultural experiences, future society, and the economy. To achieve this goal we intend to bring together a unique community of researchers and users to study, understand, and find solutions to real problems. Researchers will be drawn from diverse disciplines, including social science, engineering, computer science, the arts, and medical research; users will come from the community, business, and government.

The DE Theme has formed 'challenge areas' to describe the research which the theme can consider supporting: Communities and Culture; Sustainable Society; New Economic Models; and IT as a Utility. This call focuses on IT as a Utility.

 Further information is available at:
http://www.rcuk.ac.uk/research/xrcprogrammes/Digital/research/Pages/home.aspx and
http://www.epsrc.ac.uk/ourportfolio/themes/digitaleconomy/Pages/default.aspx

IT as a Utility Network

The ITaaU Network+ is funded by the DE theme. The project PI is Professor Jeremy Frey (Southampton) with Co-PIs Professor Gerard Parr (Ulster), Dr Richard Mortier (Nottingham), Dr Mike Surridge (Southampton), Professor Mark Sandler (QMUL). The project will support traditional networking activities, meetings, facilitated workshops, and has limited support for Pilot projects, and secondments.

Background – IT as a Utility (ITaaU)

"IT as a Utility" is about the provision of information and communications technology in a transparent and highly usable manner. It is closely related to Grid and Cloud Computing with its emphasis on making ICT resources available with minimal effort and almost invisibly to the user. Cloud paradigms for access to applications and infrastructure are now well established, and are changing the way users interact with applications, especially where the application is accessible from multiple devices and users in dynamic and mobile environments.

However, such interactions are only the start of the move towards "IT as a Utility". Accessing elements such as digital content, sensors and other real-world devices (i.e. the Internet of Things) is already becoming possible. As user communities become more integrated with the Internet, people will have access not just to utility storage (as they do today) but to rich and complex utility content (including live sensor data, user participation and 'just in time' personalised media). This content will be managed and exploited by a wide range of interacting utility applications and autonomous agents communicating with consumer-usable end-points that are not necessarily computers or smart phones. The "ITaaU Network+" is working towards simple, usable, and safe IT provision from smart services, surroundings, and information stores.

In the public arena, smart phone apps have shown that there is a demand for such easy-to-use IT functions, yet the potential scope is much greater. The ITaaU Network+ will promote research into providing access to a wider range of IT facilities that are simple to use. It is not enough to provide the services and the means of using them securely: the network really needs to understand the human aspects of such services, including the barriers, perceived as well as real, that inhibit new users of the services. We rely implicitly on other things, such as our cars and our electricity supply, so we need to encourage the same level of trust in, and use of, IT utility services: the network has to tackle such issues from a user perspective.

The DE challenge area of "IT as a Utility Network+" aims to bring to together researchers from the many disciplines needed to understand the provision, uptake, usability, management, robustness, security, trustworthiness, performance and sustainability of applications and services delivered in this manner.

Project applications

In the initial phase, the ITaaU Network+ will fund up to two projects, aiming for wide coverage of the challenge area. Individual projects an request a maximum of £50,000 total funding (at FEC rates) and are expected to last for a maximum of 6 months.

Projects <u>must</u> be interdisciplinary in nature, and should preferably involve more than one institution or organisation. Interdepartmental collaboration is the minimum acceptable level of interdisciplinarity; industry involvement is strongly encouraged. Projects <u>must</u> also involve and engage with real users and must be able to demonstrate reasonable prospects of continuation funding to enable sustainable development.

The priority areas for applications are as follows:

- ✓ Usability and the user experience
- ✓ Ethics, education and skills in utility computing environments
- ✓ Social computing platforms and open data
- ✓ Smart spaces: the Internet of Things
- ✓ Security, trust, and governance
- ✓ Economics and sustainability of services

For subsequent phases, project calls are likely to be based on the outputs from workshops or sandpits run under the auspices of the ITaaU Network+. Such events will produce white papers, which will be used as the basis for future calls. We may also issue a further call for proposals of different types following feedback from the Network Advisory Group. Applicants for all these calls will be expected to meet the usual RCUK and EPSRC rules for eligibility. We aim to fund a total of 10 pilot projects over the lifetime of the Network.

Pilot Project Management

The ITaaU Network research coordinator will liaise between the ITaaU investigators and the pilot projects. The Pilot projects will be required to keep the ITaaU investigators informed of progress (e.g. via reports, a web site or a blog) in a timely manner and submit a report on the activities and outcomes of the projects within a month of the end of the pilot project.

While the usual RCUK rules with regard to Intellectual Property will apply, it is expected that the outputs of any project will be shared with the "IT as a Utility Network+" Management Team for inclusion in the project web site and other promotional materials to inform the Network as a whole and wider public in an appropriate and timely manner in such a way as to achieve some of the main aims of the funding, that is growing the Network and its associated research base.

The funding will be awarded via a sub-contract with the University of Southampton, which will specify the agreed terms and allow for any issues with respect to background IP to be highlighted.

Submitting an EoI application

In the first instance please submit an expression of interest (EOI), which should be a maximum of two pages (using a minimum font size of 11pt and a minimum margin in all directions of 2cm). This document should be succinct and directed to an informed technical audience and should carefully address the following points:

1. PI surname, PI first name, Institution and partners, project title, and priority area(s) to be covered. Please provide this information clearly at the top of the first page.

2. Outline of the project idea, method, and budget.

3. Relevance to IT as a Utility. Include how you intend to meet the requirements of interdisciplinarity and the involvement of real users.

4. Skills and expertise of the main researchers, including a brief track record of work relevant to IT as a Utility.

5. Estimated costs, with an outline breakdown. The Digital Economy theme is RCUK funded and so is based on 80% fEC costing. EPSRC rules on eligibility and expenditure will apply. Pilot projects will be funded at 80% fEC as normal for RCUK, but we expect to see 100% expenditure spend, and we will report to RCUK in this format at the project end. For example, if you apply for £50k, the Network+ will make only £40k available, requiring £10k to be contributed by your own institution; but we would expect an expenditure report demonstrating how the entire £50k was spent.

6. Potential for short-, medium-, and long-term impact in accordance with the IT as a Utility vision and objectives. Indicate potential sources of continuation funding.

7. Details of support from any project partners, including where appropriate brief details of any contributions, financial and otherwise.

8. A project partner is NOT essential for this call. Projects are limited to up to 6 months in duration

9. Applications should be submitted by e-mail to Jeremy Frey (J.G.Frey@soton.ac.uk) and a copy sent to Sarah Milsted (S.J.Milsted@ncs.ac.uk).

Please note: Applications that fail to state at the top of the first page the information required in [1] above will not be considered. No other attachments are necessary and if received will be discarded and not used in the assessment process. Proposals that go over the 2-page limit will be cut down and the sift panel will only see the first two pages.

Assessment process

Proposals will be assessed in three stages:

Stage 1: Management team sift. Applicants whose EOIs are successful will be invited to submit full details of their proposals, up to a maximum of 5 pages, and with full financial details (1 page) and contributor track record details (1 page).

Stage 2: Peer Review of selected proposals

Stage 3: Review according to the following Assessment Criteria:

- Suitability for the call: Is it DE? Is it research? Is it novel"? Is it IT as a Utility? Is it relevant to the call themes; Articulation of problem and "so-what?" factor (what makes this project stand out?) Identifying the potential to inform the research challenges for IT as a Utility is encouraged. How will the project help grow and sustain the ITaaU Network?
- Standard RCUK assessment criteria will also be applied: Quality; Importance; Impact; The applicant's ability to deliver the proposed project within budget and in time;
- Evidence of a planning and management process for the duration of the project will be required.
- To ensure fairness and to avoid conflict of interests all proposals put forward for consideration and ultimately shortlisted will be also approved by the independent ITaaU Network Advisory Board.

Key dates

Request for EoIs formally announced 12 October 2012.

Deadline for EoI applications for pilot studies, submitted by e-mail to j.g.frey@soton.ac.uk and s.j.milsted@ncs.ac.uk by 17:00 on 12th November 2012.

Request for full proposals will follow in early December with a closing date for the full applications of 17:00 on the 7 January 2013

Successful applicants will be notified in late January 2013 and projects must commence within 2 months of the award.

Eligibility

This funding is provided in accordance with EPSRC guidelines. For information on the eligibility of organisations and individuals to receive this 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 via RCUK funding, higher education institutions, and some research council institutes and independent research organisations are eligible to apply. A list of eligible organisations to apply to RCUK is provided at: http://www.rcuk.ac.uk/research/Pages/Eligibilityforrcs.aspx

Contacts

For further information on the IT as a Utility Network+ - http://www.itutility.ac.uk/ the Digital Economy theme http://www.rcuk.ac.uk/research/xrcprogrammes/Digital/research/Pages/home.aspx and http://www.epsrc.ac.uk/ourportfolio/themes/digitaleconomy/Pages/default.aspx

Please contact Jeremy Frey j.g.frey@soton.ac.uk or Sarah Milsted s.j.milsted@ncs.ac.uk with any queries.