Competition for funding

Solving urban challenges with data

DEADLINE
21 January 2015

Collaborative R&D and Feasibility Studies
Innovate UK, Natural Environment Research Council (NERC) and Economic and Social Research Council (ESRC) are to invest up to £7.5m in collaborative R&D projects, with a proportion available for feasibility studies. Proposals must be collaborative and business-led.

We are seeking proposals for innovative, commercial solutions to increase the resilience, quality of life or economic performance of urban areas by integrating environmental, social and/or economic data with data from other sources. The focus is on better defining and solving problems through new ways of combining data.

We are primarily seeking to fund collaborative research and development (industrial research), with a business partner attracting 50% public funding for their project costs (60% for SMEs). We expect collaborative R&D projects to range in size from £250k to £1m, although we may consider projects outside this range.

Up to £2.5m of the total funding will be available for smaller-scale collaborative feasibility studies (or pre-industrial research). These will generally attract up to 65% public funding for their project costs (75% for SMEs). We expect feasibility studies projects to range in size from £50k to £200k.

Up to £0.5m is specifically for projects which use historic or new datasets collected by satellites to develop new services. Up to £2m is available from NERC and £0.5m from ESRC for research components.

The competition opens for both types of project application on 8 December 2014. The deadline for feasibility studies receipt of applications is noon 18 March 2015 and the deadline for collaborative R&D expressions of interest is noon 28 January 2015.

An online briefing event for potential applicants will be held on 10 December 2014. Workshops for potential applicants will be held in November and December 2014.

**Background**

To be successful in the future, cities need to deliver a thriving economy, great quality of life and reduced environmental footprint, while managing growing economic, social and environmental stresses.

Cities are using increasingly complex ways to gather data about their environmental, social and economic performance. Use of such data can enable businesses, social enterprises and other organisations to better understand and respond to the interrelated challenges facing our cities.

When combined with more traditional kinds of data, we are able to add significant value to our knowledge of everyday urban lives and to create new kinds of products and services that meet the needs of people, their governance and businesses.

This competition is an initiative of the new urban living innovation platform, which has been created to develop the opportunities for integrating urban systems.

**Scope**

We are seeking business-led collaborative R&D projects that will use environmental, economic and social data to address urban challenges or develop commercial solutions for future cities. The competition is open to enterprises of any size and we are encouraging collaborations with universities and eligible research establishments.

We expect proposals to include at least one potential user (such as a local authority or a community group), and to describe how they will create a new value proposition through integration of datasets – at least one of which is an environmental, economic or social dataset. The use of personalised data is encouraged where it can deliver innovative services for people, including improving the user design and interface.

Monitoring the urban environment is of interest so the development and deployment of sensors are in scope, as are improvements in decision making and planning. Satellite acquired data is also within scope.
Projects should address a specific urban challenge which may include one or more of the following areas: transport, health, energy, built environment, water, financial services or other.

**Environmental data**

Environmental data is concerned with observing the processes of, and the impact of humans on:
- land, water and air, including the atmosphere
- all organic and inorganic matter and living organisms
- interacting natural systems that include these components.

**Social and economic data**

Social and economic data is concerned with society and the economy and includes:
- longitudinal studies (e.g., ESRC birth cohort studies and Understanding Society)
- cross-sectional studies (e.g., European Social Survey or British Election Study)
- data available from the UK Data Service
- other data such as administrative data, transactional data held by private organisations, or social media data.

**Personalised data**

Personalised data can identify an individual and can be very valuable. We welcome proposals that produce and/or make use of personal data to provide solutions relevant to the individual. Personal data must comply with data protection laws. See ESRC Framework for Research Ethics (www.esrc.ac.uk) and NERC ethics policy (www.nerc.ac.uk).

**Datasets**

Data can be drawn from anywhere. For some possible sources of datasets see the _connect page at https://connect.innovateuk.org/web/solving-urban-challenges-with-data_

Please note:
- access to datasets will need to be agreed before the project work begins
- any required development work on datasets will need to be costed into the project
- data may require a commercial licence if use is developed beyond this competition – include any costs of this to explain the potential of an initiative.

Feasibility studies will be preparatory to industrial research and will carry out initial R&D studies on the integration of data from more than one source (at least one of which must be environmental, social or economic) to develop new solutions to urban challenges. Projects are likely to work on improving the clarity and usability of datasets to allow integration of data. A typical output would be a prototype tool enabling a solution and a basic business model for the tool.

Collaborative R&D projects will be business-led industrial research to work with city and research organisations to integrate data from more than one source (at least one of which must be environmental, social or economic) to develop new commercial products and solutions to urban challenges. These could be improvements to an existing service or the development of a new service or process with a potential value to a specified community. A typical end user would be a local authority, service provider, community group or government department.

Note that while a project may be scalable to many locations, in this competition we are looking for proposals to be proven in a specific place.

Consortia for both types of project will typically involve a problem owner (such as a local authority), a business end user, a developer, a data provider and experts who understand the data.

NERC will make up to £2m available to support research to develop and/or supply datasets. ESRC will make up to £0.5m available to support research to develop and/or supply datasets and/or otherwise contribute.

Applicants will retain any intellectual property developed during a project. However, upon project completion, applicants are required to present their outputs at a workshop planned for summer 2017.

**Funding allocation and project details**

We have allocated up to £7.5m to fund collaborative R&D projects and feasibility studies in this competition. This includes up to £0.5m specifically for projects using satellite infrastructure for data collection or exploitation. While research establishments and Catapults are encouraged as consortium partners, their participation in a project cannot exceed 50% of the total project costs.

Successful applicants can attract grant funding towards their eligible project costs. The percentage of costs that we pay varies, depending on the type of research being carried out and the type of organisation involved.

**Collaborative R&D projects**

For the collaborative R&D projects (industrial research), the business partner in the project can attract 50% public funding for their project costs (60% for SMEs). Projects must be led by a business. We expect collaborative R&D projects to range in size from £250k to £1m. We may consider larger projects but applicants should contact us directly before making their application to discuss further. Projects should last up to 2 years.

**Feasibility studies**

Up to £2.5m of the total funding will be available for smaller-scale feasibility studies conducting pre-industrial research. Projects must be business led and a business partner can attract 65% public funding for their projects costs (75% for SMEs). We expect feasibility studies projects to range in size from £50k to £200k and to last up to 12 months.

Applications for both types of project are assessed on individual merit by an independent panel of experts. We may apply a portfolio approach across the different topic areas.
To find out whether your business fits the EU definition of an SME, see: [http://ec.europa.eu/enterprise/policies/sme/index_en.htm](http://ec.europa.eu/enterprise/policies/sme/index_en.htm)

**Application process**

The feasibility studies will open for applications on **8 December 2014**. All applicants must first register via the Innovate UK website by noon **11 March 2015**. The deadline for applications is noon **18 March 2015**.

The collaborative R&D competition is a two-stage process that will open for applications on **8 December 2014**. All applicants must first register via the Innovate UK website by noon **21 January 2015**. The deadline for applications is noon **28 January 2015**. The second stage deadline for invited applications is noon **18 March 2015**.

A webinar briefing will be held on **10 December 2014** to highlight the main features of the competition and explain the application process for both feasibility studies and collaborative R&D.

**Key dates**

### Collaborative R&D

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<tr>
<td>Competition opens</td>
<td>8 December 2014</td>
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<tr>
<td>Competition briefing</td>
<td>10 December 2014</td>
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<tr>
<td>Registration deadline</td>
<td>21 January 2015 noon</td>
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<tr>
<td>Expressions of interest (EOI) deadline</td>
<td>28 January 2015 noon</td>
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<td>Stage 2 opens for invited applicants</td>
<td>16 February 2015</td>
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<td>Deadline for invited applications</td>
<td>18 March 2015 noon</td>
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### Feasibility studies

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**More information**

For more information and all the documents you need to read before you apply, including the [Guidance for Applicants](interact.innovateuk.org/), go to the web page for this competition at [https://connect.innovateuk.org/web/solving-urban-challenges-with-data](https://connect.innovateuk.org/web/solving-urban-challenges-with-data).

To apply you must first register with us through the competition page on the website. Registration opens when the competition opens and closes a week before the deadline for applications.

**Competition helpline:** 0300 321 4357  
Email: support@innovateuk.gov.uk

**Publicity**

As part of the application process all applicants are asked to submit a public description of the project. This should adequately describe the project but not disclose any information that may impact on intellectual property, is confidential or commercially sensitive. The titles of successful projects, names of organisations, amounts awarded and the public description will be published once the decision to offer an award has been communicated to applicants by email. Information about unsuccessful project applications will remain confidential and will not be made public. E-mail pressoffice@innovateuk.gov.uk with any queries.