Technology Strategy Board
Driving Innovation

AgriTech

Centre of excellence in agri-informatics and sustainability metrics

INVITATION TO PROSPECTIVE CONSORTIA

April 2014

The *UK Strategy for Agricultural Technologies* published in July 2013, committed £90m to establish centres for agricultural innovation.

The aim of this agri-tech strategy* is to encourage businesses to develop, adapt and exploit new technologies.

It was agreed that the first centre would be for agricultural informatics and sustainability metrics.

The Government will invest up to £10m of capital funding in the venture over five years, and we expect that this will be matched by at least £10m from industry.

This world-class centre will benefit the whole agri-tech sector. It will become a repository for and a single point of access to relevant data sets, as well as being a centre of excellence for sustainability metrics and 'big data' mining, integration and analysis.

We envisage that the centre will be set up and operated by a single consortium of publicly and privately-funded organisations, and that small and medium-sized businesses will play an influential role.

This prospectus outlines a two-stage process to identify and select that consortium; that process is being managed by the Technology Strategy Board.

The first is an outline stage where we will invite proposals from existing or emerging consortia of business and academia, as well as individual businesses that are seeking to form partnerships.

Following expert review, the second stage will begin with a facilitation process to support the formation of full consortia from shortlisted outline proposals. These consortia will be asked to submit full proposals to run the centre.

The initial outline proposal stage opens on **30 April 2014**, with a deadline for those outline proposals at noon on **18 June 2014**.

A briefing event for potential applicants will be held in London on **19 May 2014**.

Industrial
Strategy
Securing jobs and a stronger economy

* A copy of the agri-tech industrial strategy can be downloaded at
   www.gov.uk/government/publications/uk-agricultural-technologies-strategy

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BACKGROUND

In this age of 'big data', economic growth is increasingly dependent on the ability to access and exploit information.

The Agri-Tech Leadership Council is an industry-led body set up to unify the agricultural technology sector. It believes there are many opportunities to add value from the substantial volumes of data being generated by researchers, farming businesses, distributors, retailers, consumers and others involved in agriculture and food supply chains.

Integrating large, diverse data sets with information from other sources, such as from socio-economic, satellite imaging, environmental monitoring, meteorology and soil geochemistry data, will drive innovation and improve sustainability throughout the agri-tech sector.

As set out in the UK agri-tech strategy, the Centre for Agricultural Informatics and Sustainability Metrics will develop and promote best practice in data analysis for the wider benefit of the agri-tech sector.

It will aid understanding of physical, biological, economic, social and environmental factors and the way they interact to affect agricultural systems and the supply chains that flow into and from primary production.

An important theme will be collaboration with other experts in the field to develop and agree robust and realistic metrics and standards. The centre will be expected to learn from and build links with existing centres of expertise, such as:

- Alan Turing Institute for Data Science
- Defra Sustainable Intensification Platform
- Catapult technology and innovation centres
- European Bioinformatics Institute
- Environmental Change Network
- Earth Observation Framework
- Open Data Institute.

Introducing approaches used in other sectors is a key focus of the agri-tech strategy. The centre will need to develop in-house expertise and forge collaborations with businesses and experts within and beyond the agriculture sector, in the UK and overseas. That will

enable it to become a world leader in developing novel methodologies, tools and algorithms to integrate and interrogate diverse and often very large, incomplete and 'dirty' (inaccurate, incomplete or erroneous) data sets.

Sustainable intensification is at the heart of the agri-tech strategy. Data at field, farm and landscape level is critical to understanding the impact of agriculture and to shape agri-food research. The Agri-Tech Leadership Council believes that developing internationally agreed metrics and performance indicators will be critical in the drive towards sustainable intensification.

The centre will therefore need to develop agreed, realistic and standardised approaches to data acquisition, analysis and presentation. This will place the UK in a strong international leadership role to drive the sustainable intensification of agricultural and food production supply chains across the world.

SCOPE

The Centre for Agricultural Informatics and Sustainability Metrics will have a strong focus on knowledge exchange in its support of business, policymakers and researchers. It will have four key components:

1. **a data and information management hub** to acquire, organise, analyse and disseminate data of value to businesses and researchers; also data generated by other centres for agricultural innovation will be managed by this hub

2. a world-class **centre of excellence** in agri-informatics and sustainability metrics

3. **a commercial arm** to manage intellectual assets, exploit new opportunities and maximise the economic potential of emerging data sets, analytical tools and metrics

4. **a provider of analytical evidence** by which progress in delivering the overall agri-tech strategy can be monitored and assessed.

The centre will build on existing UK capacity and capability, drawing together a multidisciplinary team of experts from the research base and industry, including those not traditionally aligned with the agriculture sector.

It will connect end-users from across food and non-food supply chains, including farming businesses, food manufacturers, retailers, consumers, policymakers, regulators and the third sector.

We expect the consortium to include small and medium-sized businesses as well as larger companies and we will encourage arrangements where SMEs play an active role.

Outline proposals will need to explain how they will deliver one or more of the four key components above. In addition, they will need to explain how the consortium will address the following requirements of the centre:

- to be industry-focused and able to attract significant industry co-funding
- to be founded as far as possible on existing facilities and expertise
- to act as a 'champion' for open access
- to have appropriate public-private governance, with clear accountability to stakeholders

- to offer expertise to researchers, industry and policymakers needing to source and analyse data sets to address questions, refine hypotheses and identify new directions for research
- to have access to and be allied with a strong and relevant research base
- to manage appropriately the intellectual property (IP) of different stakeholders, including IP generated within the centre, as well as IP shared with it
- to attract and anchor in the UK knowledge-intensive activities and requirements of globally mobile companies
- to follow a sustainable business model, driven by a mission to 'translate research into practice' through effective knowledge exchange
- to demonstrate how the outputs from the centre will be made accessible to all stakeholders, from farmers and others in the agricultural supply chain through to food producers, consumers and the general public
- to have a key co-ordinating role across the full network of centres for agricultural innovation by providing data and analyses to help deliver the entire agri-tech strategy.

The work of the centre will be founded on excellent research, but there will also be a strong focus on knowledge exchange and business support as well as commercial exploitation of its work.

FUNDING ALLOCATION

Up to £10m of government capital funding is available to establish the Centre for Agricultural Informatics and Sustainability Metrics. We expect outline proposals to include details of how matched funding from the private sector can be secured to cover the centre's activities.

Match funding from industry may include pledges to fund programmes of work within the remit of the centre, the costs associated with providing and running facilities used by the centre, in-kind staffing costs, and the re-investment of income generated by the centre.

We are open to ideas about the centre's business model, which may reflect different commercial and academic funding opportunities. However, applicants will need to demonstrate how their business plan will make the centre financially self-sustaining within five years.

APPLICATION PROCESS

The Technology Strategy Board is managing the process of identifying and selecting a consortium to set up and operate the Centre for Agricultural Informatics and Sustainability Metrics.

We are seeking a consortium of publicly and privately-funded organisations through a two-stage process that opens for outline proposals on **30 April 2014**.

Stage 1 – Applicants submit an outline proposal which is reviewed by a panel of experts.

Stage 2 – We invite selected applicants to submit a full proposal.

All applicants must first register via the Technology Strategy Board website by noon on **11 June 2014**. The deadline for outline proposals is noon on **18 June 2014**.

To help the development of consortia we shall host a briefing event in London on 19 May 2014. This event will provide an overview of our ambitions for the centre, explain the application process and support organisations seeking help with collaboration.

Applicants should register for the briefing event at our dedicated web page www.innovateuk.org/agri-tech-informatics **Applicants are strongly recommended to attend this event.**

In Stage 1, we will accept outline proposals from groups of organisations already starting to form a consortium, as well as individual businesses looking to join a consortium.

These Stage 1 outline proposals will be reviewed by an independent panel of experts. Successful Stage 1 applicants will then be invited to a collaboration event on 17 July.

This event will involve facilitation to help applicants to form full consortia, as well as assist us in refining the specification and detailed timeline for Stage 2, when full proposals are to be submitted. Indicative dates for Stage 2 are provided in the table on the rear of this document.

Note: All deadlines are at noon.

KEY DATES

STAGE 1: OUTLINE PROPOSAL

Opening date for outline proposals	**30 April 2014**
Briefing for applicants	**19 May 2014**
Registration deadline	**11 June 2014 noon**
Outline proposal deadline	**18 June 2014 noon**
Collaboration event – by invitation only	**17 July 2014**

STAGE 2: FULL PROPOSAL (INDICATIVE DATES)

A refined specification to be published	**August 2014**
Full proposals to be submitted	**October 2014**
Decide winning consortium	**Late 2014**
Announcement of winning consortium	**Late 2014/early 2015**

MORE INFORMATION

For more information and all the documents you need to read before you apply,
go to the web page for this opportunity at **www.innovateuk.org/agri-tech-informatics**

To apply you must first register with us through that web page.
Registration closes a week before the deadline for proposals.

Helpline: 0300 321 4357

Email: agritechcentres@innovateuk.org

The Technology Strategy Board is the UK's innovation agency.

We accelerate UK economic growth by stimulating and supporting business-led innovation.

We are a business-led executive non-departmental public body, sponsored and funded by the Department for Business, Innovation and Skills.

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