Improving the productivity of Agri-Food systems using satellite technology

Andy Proctor
Lead Technologist
Innovation doesn’t just happen

Strategic innovation doesn't just happen. It happens as a consequence of coordinated collaboration between business, government and research.
Improving the productivity of Agri-Food systems using satellite technology

• **AKA “Satellite Food”**

• **Aim** is to stimulate innovation to improve the productivity of agri-food systems using satellite technology
  – Also to drive efficiency in and improve sustainability of the agri-food supply chain

• Up to £3.75m will be **invested** in business led, collaborative projects addressing the scope
  – Combination of technical feasibility and collaborative R&D activities.
    * CR&D focus is near to market activity
  – **Co-funded with NERC**
Satellite Food - Scope

- **Primary production:**
  - farm machinery guidance and auto steer/controlled traffic
  - autonomous systems
  - variable rate application
  - yield/biomass/soil mapping and monitoring
  - livestock monitoring/tracking
  - whole farm system connectivity
Satellite food – scope 2

• **Post- farm gate:**
  – farm machinery monitoring and asset management
  – geo-traceability/georeferencing
  – field delineation/survey
  – compliance, mapping
  – stock movement/traceability and provenance
  – supply- side management and logistics/delivery
Scope – of particular interest

- incorporating existing data into useful products
  - NERC data is open access and free of charge
- coupling earth observation data into models (or products) which are then accessible to the agri-food sector
- improvements to communications and data exchange, based on open standards
- using of innovative technologies in real-time operations, eg the Galileo or Copernicus system
- new business models to derive new service architectures and applications.
The “ideal project”

• A clear commercial opportunity to open up or exploit a significant growth market.

• A technical challenge that requires the creation of an industrially driven consortium and innovative and risky research and development to solve.

• A realistic project with deliverables and applications that are innovative, commercially exploitable and of wider benefit.

• A demonstrable need for support.
Types of project

Research Councils

Blue sky

Feasibility

Technology Development

Technology Demo

System Dev.

System Qual.

Prod. Prototype

Commercialisation

Innovate UK and its co-funders funding

Commercial Investment
Venture Capital

Market readiness
# Competition eligibility – Technical Feasibility

<table>
<thead>
<tr>
<th>Type of Competition</th>
<th>Single Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project composition</td>
<td>Single or Collaborative</td>
</tr>
<tr>
<td>Funding available</td>
<td>Up to £750k</td>
</tr>
<tr>
<td>Project Size</td>
<td>Between £40k and £200k</td>
</tr>
<tr>
<td><strong>Approx % Funding for business</strong></td>
<td>70% Small / 60% Medium / 50% Large</td>
</tr>
<tr>
<td>Anticipated Project length</td>
<td>Up to 12 months</td>
</tr>
<tr>
<td>Application form</td>
<td>10 marked questions</td>
</tr>
</tbody>
</table>

- **Register interest up to 1 week before close**
- **Application and any accompanying forms submitted**
- **Assessment and moderation panel**
- **Notifications**
## Competition eligibility – CR&D

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<th>Type of Competition</th>
<th>Single Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project composition</td>
<td>Collaborative</td>
</tr>
<tr>
<td>Funding available</td>
<td>Up to £3m</td>
</tr>
<tr>
<td>Project Size</td>
<td>Up to £1m</td>
</tr>
<tr>
<td><strong>Approx % Funding for business</strong></td>
<td>45% Small / 35% Medium / 25% Large</td>
</tr>
<tr>
<td>Anticipated Project length</td>
<td>Up to 24 months</td>
</tr>
<tr>
<td>Application form</td>
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**Register interest up to 1 week before close**

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Assessment and moderation panel

Notifications
Competition Page

Satellites to improve agri-food systems

Status: Forthcoming

Award: Up to £3.75 million

Opens: 18 Nov 2015, 00:00
Registration closes: 17 Feb 2016, 12:00
Closes: 24 Feb 2016, 12:00
Support phone number: 03000 321 4357

Key features: Innovate UK and the Natural Environment Research Council (NERC) are to invest up to £3.75 million in collaborative R&D projects and relevant technical feasibility studies to stimulate innovation to improve the productivity of agri-food systems using satellite technology.

Programme: Feasibility studies

Innovate UK and the Natural Environment Research Council (NERC) are to invest up to £3.75 million in collaborative R&D projects and relevant technical feasibility studies to stimulate innovation to improve the productivity of agri-food systems using satellite technology.

This competition links two key areas of innovation: agriculture & food and satellite applications. Its main aim is to stimulate the development and adoption of new technologies and/or business models based on the innovative use of satellite technology, which help to improve the productivity of the UK food and farming industries and simultaneously address the environmental impacts of increased land use and intensification.

Competitions Helpline

Register for Innovate 2015

Talk to us Monday - Friday 9.00 am – 5.30 pm
Email: support@innovateuk.gov.uk
Telephone: 03000 321 4357
Twitter: @innova

Also see:
- General competition
- FAQs
- Video on our Application Process
- Video on our Funding Rules
- Innovate UK success stories

DOWNLOAD documents
Enhancing Food Composition Quality – CR&D
(Reducer salt, sugar and fat and increasing fibre)

• Up to £10m available for industry led projects that reduce salt/sugar/fat and/or increase dietary fibre across the food production chain.
• Project size £250k to £1m, up to 3 years’ duration
• Key dates –
  o Collaboration building events, September 2015
  o Stage 1 opens 5th October 2015
  o Stage 1 closes 25th November 2015
  o Stage 2 opens 4th January 2016
  o Stage 2 closes 4th February 2016
We can’t stop thinking about the future...

Innovate UK works with people, companies and partner organisations to find and drive the science and technology innovations that will grow the UK economy - delivering productivity, new jobs and exports

....keeping the UK globally competitive in the race for future prosperity.