

# Farming Futures: Automation and Robotics

Date 18<sup>th</sup> January 2023  
10:00 – 15:00

Pedro Carvalho, Knowledge Transfer Manager, Agrifood

[www.ktn-uk.org](http://www.ktn-uk.org)



InnovateUK  
KTN

# Housekeeping

- Please stay on mute throughout the talks
- Please put any questions in the Q&A function, or in the chat (please start with Q-) and also use the chat to network
- The morning briefing will be recorded but not the afternoon collaboration session

# Agenda

## Briefing

10:00 – 10:10	<b>Welcome and Overview of the Event</b>	Pedro Carvalho, IUK KTN
10:10 – 10:25	<b>Farming Innovation Programme</b>	Kate Pugh, DEFRA
10:25 – 10:40	<b>Farming Futures: Automation and Robotics Scope</b>	Robert Crook, IUK
10:40 – 10:55	Q&A	
10:55 – 11:15	<b>Application Process</b>	Dawn Manser, IUK
11:15 – 11:45	Q&A	
11:45 – 13:30	Lunch break	

## Consortia Building

13:30 – 13:35	<b>Welcome and overview of the event</b>	Simon Baty, IUK KTN
13:35 – 14:05	<b>Breakout Room – Round 1</b>	Facilitated by IUK KTN
14:05 – 14:20	<b>What makes a strong consortium?</b>	Simon Baty, IUK KTN
14:20 – 14:50	<b>Breakout Room – Round 2</b>	Facilitated by IUK KTN
14:50 – 15:00	<b>Event Closes</b>	Pedro Carvalho, IUK KTN



## About Us

Innovate UK KTN exists to connect innovators with new partners and new opportunities beyond their existing thinking – accelerating ambitious ideas into real-world solutions.





**Innovate  
UK KTN  
Team**



# We have deep expertise in AgriFood



**Livestock &  
Aquaculture**



**Crops**



**Food**

# How we can help



**Make powerful  
connections**



**Secure funding**



**Get expert  
insight**



**Keep up  
to date**



Department  
for Environment  
Food & Rural Affairs

# Farming Innovation Programme

Automation and Robotics – January 2023

**Kate Pugh**

Agri-Innovation Team Lead - Defra





# The Farming Innovation Programme

- Part of Defra's Agricultural Transition Plan
- £270M of grant funding for R&D through to 2028/29
- To enhance productivity, environmental sustainability and resilience in England's farming sectors
- Funding is awarded on a competitive basis to high quality, innovative projects
- Collaborative projects must benefit farmers and growers in England.



The **Farming Innovation Programme** offers a range of opportunities for farmers, growers, businesses and researchers to collaborate on industry-led research and development:



Small **Research Starter Projects** where farmers, growers & foresters can explore a new idea, or **Projects to Accelerate Adoption** (coming soon) where farmers and growers can trial new innovation on their farms.



**Feasibility projects** where businesses can check if a research idea works in practice.



**Small/Large Partnership Projects**, where businesses can further develop a new farming product or service towards commercialisation.



**Themed projects**, where businesses and researchers can work on longer-term innovation focussing on issues like **Climate-Smart Farming**, or **Sustainable farm-based Proteins**.

# Why are we supporting innovation?

**Productivity:** The UK has seen lower productivity growth than our neighbours over the last 30 years.

**Environment:** Agriculture accounted for 10% of UK greenhouse gas emissions in 2018.

**Fragmentation:** many fantastic researchers, innovative businesses and promising ideas, but players don't necessarily collaborate effectively

**Coordination:** failures in the current innovation system result in poor translation of public spending into real life impacts on productivity/sustainability

**Adoption:** Low levels of uptake of innovation by farmers, growers, businesses in large part due to capital risk & ineffective knowledge sharing.

## Previous Programmes

### **2013 - Agri-Tech Strategy**

£70m Agri-tech Catalyst

£90m for 4 Agri-tech Centres

### **2018 -**

### **Industrial Strategy Challenge Fund**

**(ISCF)** £90m Transforming Food Production Challenge.

**2021 - £14.5m Farming Innovation Pathways** fund.





# Farming Innovation Programme Timeline

## October 2021

- £1M - Research Starter Projects (round 1)
- £8M - Feasibility Projects (round 1)
- £11M - Small Partnership Projects (round 1)

## March 2022

- £8M - Large Partnership Projects (round 1)
- £12.5M - Climate-smart farming

## May 2022

- £1M - Research Starter Projects (round 2)

## July 2022

- £12.5M - Sustainable farm-based Proteins

## Autumn 2022

- Feasibility Projects (round 2)
- Small Partnership Projects (round 2)

## January 2022

- £12.5M - Automation and Robotics
- £1M Research Starter Projects (round 3)





# Farming Innovation Programme - Current Picture

- As of January 2023, we have committed over £83m of funding across 10 competitions
- In September applications closed for the second thematic competition set by Defra, with £12.5 m across two competition strands (feasibility and industrial research) focussed on developing innovative solutions for sustainable farm-based protein production.
- Applications closed for round 2 of Feasibility and Small R&D Partnership projects in the Autumn. The £5.5 million 'Feasibility Studies' competition will offer grants to support research and development through the difficult testing phase of an idea to see if it is worth investing in further. The £11 million 'Small R&D Partnership' will offer grants to further develop new solutions that will ultimately address major on-farm or immediate post farmgate challenges.
- This competition, focusing on Automation and Robotics, opened on 9th January. We have a number of other competitions coming up over the next few months.



# Farming Innovation Programme Projects



## **ARWAC (FIP Feasibility)**

This project lays the foundation for next-generation robotic vehicles powered by renewable energy and tooled to control blackgrass. It drives productivity by increasing yield through weed eradication. This project will push the technology from laboratory stage to full testing in multiple farm environments.



## **CowView (FIP Small R&D Partnerships)**

CattleEye is developing a novel way to gaining insights into dairy cows. The completely hands-free solution will monitor a cow's welfare and performance without the need for wearable devices. The new version CowView will advance the product, to enable lesion detection, increase accuracy and offer data so intervention can be timely.



## **Muddy Machines - Robotic Courgette Harvester (FIP Feasibility)**

Developing a novel class of agricultural machine that can reliably replace manual labour. Building from their autonomous asparagus harvester, Muddy Machines are focussing on Courgettes, which present more complex challenges for imaging, software, and gripping.





# Farming Futures Automation and Robotics Scope

**Robert Crook**

Innovation Lead, Agriculture and Food  
Team - IUK



# Why is Defra interested in Robotics and Automation?

- By enhancing efficiency and productivity, we can improve environmental impacts (air, soil, water, biodiversity), reduce greenhouse gas emissions, help the sectors to grow, and become more resilient to future challenges.
- To support recommendations for automation innovation funding from recent Defra reviews including the Automation in Horticulture Review and National Food Strategy.
- To address key issues affecting the sector where automation & robotics can mitigate challenges. For example: labour availability, increased costs of inputs, environmental and animal welfare
- To promote development of later-stage innovations to commercial products that can be adopted by farmers





# Farming Futures: Automation and Robotics

- Industrial Research
- Experimental Design

## Total budget



**£12.5**  
Million

## Total project costs

**IR:** £500K-1M

**ED:** £750K-1.5M

## Duration

**IR:** 36 - 48 months

**ED:** 24 - 36 months



**Have a min of 50%** of total grant awarded to any farmers, growers or foresters involved in project **allocated to farmers or growers based in England**



For **collaborative** applications led by **UK businesses**

**Competition deadline**  
**15 March 2023**

**11:00**

**Projects to start by**  
**1 September 2023**

# In Scope

Projects developing ambitious new solutions for automation and robotics

## Your project must:

- demonstrate **environmental benefits and societal impact**
- include clear project **deliverables for measuring the sustainability** of the solutions, and how they are **preventing negative impact** upon the sector
- be able to demonstrate how the solution and output will **benefit farmers or growers in England**
- ensure your solutions are closely aligned with industry priorities to deliver business-orientated and transformative opportunities
- consider how it will encourage dissemination and knowledge exchange to the wider sector



# Scope

## In Scope:

Solutions must address identified major on-farm challenges or opportunities in agricultural and horticultural practices, and significantly improve:

- ✓ productivity
- ✓ sustainability and environmental impact
- ✓ progression towards net zero emissions
- ✓ resilience

## Out of Scope:

- × are equine specific
- × are forestry specific
- × are specific to non-food or ornamental plants
- × involve wild caught fisheries
- × involve aquaculture for fish production or human consumption
- × involve cellular expression of proteins or cultivated meat
- × involve acellular production systems, fermentation systems for bacteria, yeast or fungi for human consumption
- × are for the production of crops or plants for medicinal or pharmaceutical use
- × do not benefit farmers or growers in England
- × involve post gate processing and packaging



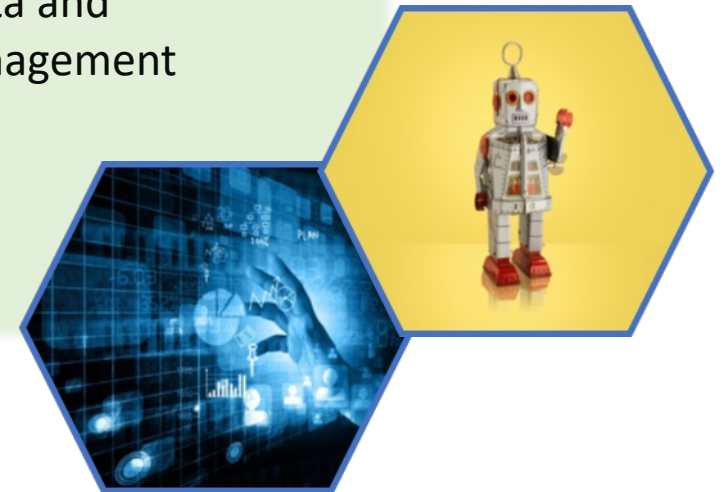
# In Scope

For **Industrial Research**, you must accelerate collaborative R&D to develop innovations for robotics and automation in agriculture and horticulture.

For **Experimental Development**, you must accelerate the deployment and uptake of innovation for robotics and automation in agriculture and horticulture that is almost at commercial stage.

The innovative technologies in your proposal must focus on one or more of the following:

- robotic and automated machines and systems for static or mobile operation
- imaging, sensing, and monitoring devices and systems to collect and store data and associated systems to process data for management records and to drive management decisions and automated actions
- systems for on-farm processing and packing operations





# Specific Themes



Focus on one or more of the following agricultural and horticultural production sectors:

## Livestock

- Monogastric
- Ruminant

## Plants

- Broadacre: cereals, root crops, grassland
- Horticulture: field based and specialist growers
- Fruit: top fruit, stone fruit and soft fruit
- Vineyard
- Protected cropping: glass and polytunnel systems
- Controlled Environment and Vertical Farming Systems

# Hints and Tips

## **Preparation is Key**

- Do not leave until last minute

## **Eligibility and Scope**

- Check carefully to avoid missing out before assessment

## **Build up your partnership**

- Get the skills and capabilities you need
- Get to know and understand your partners
- Know who you are planning to work with before you commit and make sure all partners are aware of their role and responsibilities



# Use available support

## KTN Agri-food Team

- Consortium Building Event - this afternoon 13.30 – 15.00
- <https://ktn-uk.org/agrifood/>
- On-to-one support meetings

<https://calendly.com/d/zj5-3bj-ntg/farming-futures-automation-and-robotics-support>

## Innovate UK Customer Support

- Email: [support@iuk.ukri.org](mailto:support@iuk.ukri.org)

## Farming Innovation Programme website

- <https://farminginnovation.ukri.org/>



Department  
for Environment  
Food & Rural Affairs



UK Research  
and Innovation

# Scope Q&A





# Application Process

**Dawn Manser**

Portfolio Manager, Competitions Team - IUK



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# Eligibility criteria



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# Previously submitted applications

This competition does allow you to submit a previously submitted application.

Previously submitted application	Not a Previously submitted application
A previously submitted application is an application Innovate UK judges as <u>not</u> materially different from one you have submitted before (but it can be updated based on the assessors' feedback)	A brand-new application, project or idea that you have not previously submitted into an Innovate UK competition  OR A previously submitted or ineligible application which: <ul style="list-style-type: none"><li>✓ has been updated based on assessor feedback</li><li>✓ <u>and</u> is materially different from the application submitted before</li><li>✓ <u>and</u> fits with the scope of this competition</li></ul>



# Eligibility criteria

Project eligibility	<ul style="list-style-type: none"><li>• lead must be a UK registered business</li><li>• must be collaborative</li><li>• be able to demonstrate how the project will benefit farmers or growers in England</li><li>• must carry out your project in the UK</li><li>• exploit the results from or in the UK</li></ul>	
Total project costs	Experimental Development	between £750,000 to £1,500,000
	Industrial Research	between £500,000 to £1,000,000
Project length	Experimental Development	up to 24 and 36 months
	Industrial Research	up to 36 and 48 months

# Types of organisations we fund

- Business – Small or Micro, Medium or Large registered in the UK
- Research Organisation (RO):
  - Universities (HEIs)
  - Not for profit distributing Research & Technology Organisation (RTO) including Catapults
  - Public Sector Research Establishments (PSRE)
  - Research Council Institutes (RCI)
- Public sector organisations and charities doing research activity

If you are 100% owned by a large parent company as a small subsidiary this means you are classed as a large company and will only be entitled to the relevant grant. For more information on company sizes, please refer to the [company accounts guidance](#).

# Compliance with the UK Subsidy Control Regime

On 1 January 2021, the UK left the EU and is no longer subject to EU laws on State aid. We draw your attention to the guidance issued by BEIS: [Complying with the UK's international obligations on subsidy control: guidance for public authorities](#). Please be aware this is a living document and may be updated by BEIS as time progresses.

The set rules (typically GBER) which we previously relied on for the limits of what we could award, have now been replaced by internal decisions based on the new BEIS Subsidy Control Regime, and on policy, which will in turn set out bespoke eligibility requirements for each funding opportunity.

Innovate UK is offering funding for this competition in line with the UK's obligations and commitments to Subsidy Control. To ensure that Innovate UK remains compliant with the UK's international Subsidy Control duties in respect of:

- the EU-UK Trade and Cooperation Agreement;
- Article 10 of the Northern Ireland Protocol (successful applicants which are affected by the Northern Ireland Protocol will be funded in line with EU State aid regulations)
- Article 138 of the Withdrawal Agreement (some Union law applicable after 31 December 2020 in relation to the UK's participation in Union programmes and activities)
- the Subsidies and Countervailing measures within the WTO (ASCM)
- any other Free Trade Agreements active at the time of award

All awards will be conditional on compliance at all times with the UK's International obligations on Subsidy Control - this will be reflected in the terms and conditions of any award.



# Due diligence for UK Subsidy Control Regime

Under the Subsidy Control Regime, we will carry out financial health checks and ongoing concern assurances on your organisation.

## Certify you are eligible

When submitting an application, you must certify that you are eligible for funding. If you are unsure, please take independent legal advice before applying. Should you be successful, we will complete these financial checks and assurances before confirming the grant offer.

- For more information on company sizes, please refer to the [Company accounts guidance](#).
- Further information is available on our website in the general guidance.

# Eligibility Criteria - EU State Aid Regulations – Northern Ireland Protocol

If you are an applicant who is conducting activities that will affect trade of goods and/or electricity between Northern Ireland and the EU as envisaged by [Article 10 of the Northern Ireland protocol](#), then you must apply under European Commission State aid rules.

## Undertaking in Difficulty

For applicants subject to the European Commission State aid rules, you will be required to prove that they were not an “Undertaking in Difficulty” (UiD). We will ask for evidence of this.

This test applies to:

- companies that are more than 3 years old
- companies where more than half of its subscribed share capital has disappeared as a result of accumulated losses.
- your parent or holding company

## Certify you are eligible

When submitting an application, you must certify that you are eligible for State aid. If you are unsure, please take legal advice before applying. Should you be successful, we will apply this test as part of our viability checks before confirming the grant offer.

Further information is available on our website in the [general guidance under state aid](#).

If you are applying for an award funded under State aid Regulations, the definitions for company size are set out in the [European Commission Recommendation](#) of 6 May 2003.

# Eligibility Criteria: Funding Opportunities

Funding for R&D projects split in to **2** categories; **industrial research and experimental development**.

**For feasibility studies and industrial research projects, you could get funding for your eligible project costs of:**

- up to 70% if you are a micro or small organisation
- up to 60% if you are a medium-sized organisation
- up to 50% if you are a large organisation

**For experimental development projects which are nearer to market, you could get funding for your eligible project costs of:**

- up to 45% if you are a micro or small organisation
- up to 35% if you are a medium-sized organisation
- up to 25% if you are a large organisation

**For research organisations conducting fundamental research you could get funding for your eligible project costs of up to 100%.**

For general guidance on what our research categories are please visit:

<https://www.ukri.org/councils/innovate-uk/guidance-for-applicants/general-guidance/categories-of-research-and-development/#contents-list>



# Participation Rules

**The aim of this funding opportunity is to:**

- optimise the level of funding to business and
- recognise the importance of research base to project

At least **70%** of total eligible project costs must be incurred by business.

The maximum level (**30%** of total eligible project costs) is shared by all research organisations collaborating on the project.

# What is collaboration?

In all collaborative projects there must be:

- at least two organisations claiming grant within the application (including the lead)
- a business consortium, which may involve both business and the research base
- evidence of effective collaboration

We would expect to see the structure and rationale of the collaboration described in the application.

# Making more than one application

Any one business may be involved in up to **3** applications in each strand of this competition, but can only be the lead partner in 1 application in each strand.

There must be at least two UK businesses claiming grant. If they are leading an application, they may be involved in up to 3 applications in each strand of this competition.

A research & technology organisation can be a partner in any number of applications.

# Other Innovate UK projects

If you have an outstanding final claim or Independent Accountant Report (IAR) on a live Innovate UK project, you will not be eligible to apply to this competition, as a lead or a partner organisation.

We will not award you any further funding if you:

- applied to a previous competition as the lead or sole company and were awarded funding by Innovate UK, but did not make a substantial effort to exploit that award
- applied to a previous competition as the lead or sole company and failed to comply with grant terms and conditions.



# Key Dates

Timeline	Dates
Competition Opens	9 January 2023
Briefing Event	18 January 2023
Submission Deadline	15 March 2023, 11:00
Applicants informed	19 May 2023



# **Innovation Funding Service (IFS)**

# Search for a funding competition and review criteria

## Innovation competitions

Filter competitions

Keywords  
farming

Innovation area  
Any

Update results

26 competitions

UK registered organisations can apply for a share of up to £16 million to deliver, resource efficient, low-emission food production systems. Including alternative proteins and Total Controlled Environment Agriculture (TCEA).

**Eligibility**  
This competition is open to collaborations only. To lead an industrial research project your organisation must be a UK registered business of any size.

**Opening soon**  
Opens: 18 January 2023  
Closes: 19 April 2023

[Novel, low-emission food production systems: Feasibility studies](#)

[Farming Futures: automation and robotics, industrial research](#)

UK registered businesses can apply for a share of up to £12.5 million across the two strands of this competition, to develop innovative solutions for automation and robotics. This funding is from the Farming Futures R&D Fund.

**Eligibility**  
This competition is open to collaborations only. To lead a project your organisation must be a UK registered business of any size.

**Opening soon**  
Opens: 9 January 2023  
Closes: 15 March 2023

[Farming Futures: automation and robotics, experimental development](#)

UK registered businesses can apply for a share of up to £12.5 million across the two strands of this competition, to develop innovative solutions for automation and robotics. This funding is from the Farming Futures R&D Fund.

**Eligibility**  
This competition is open to collaborations only. To lead a project your organisation must be a UK registered business of any size.

**Opening soon**  
Opens: 9 January 2023  
Closes: 15 March 2023

Funding competition

## Farming Futures: automation and robotics, industrial research

UK registered businesses can apply for a share of up to £12.5 million across the two strands of this competition, to develop innovative solutions for automation and robotics. This funding is from the Farming Futures R&D Fund.

**Competition opens:** Monday 9 January 2023  
**Competition closes:** Wednesday 15 March 2023 11:00am

**This competition has not yet opened.**

Start new application

Summary

Eligibility

Scope

Dates

How to apply

Supporting information

**Description**

The Department for Environment, Food & Rural Affairs (Defra) will invest up to £12.5 million in innovation projects.

This funding is part of Defra's Farming Innovation Programme, which is delivered in partnership with UKRI's Transforming Food Production Challenge.

# Lead Applicant: create an account

The lead applicant must create an account:

## UK registered businesses

Use Companies House lookup as it speeds up our checks by providing your company number. You are unable to enter this at a later date.

## Research organisations, academics and universities

Enter your information manually so you are not listed as a business on IFS and ensure you receive the correct funding.



This screenshot shows the 'Create your account' page for 'Your organisation' on the GOV.UK Innovation Funding Service. The page includes a 'Back' link, a beta notice, and an information icon stating that the organisation must be UK-based. Under the 'Business' section, there is a prompt to 'Find your organisation on Companies House' with a search bar containing 'nomensa' and a 'Search' button. Below this, the 'Companies House search results' are displayed, showing details for 'NOMENSA LTD', including its incorporation date (10 May 2001) and address (13 Queen Square, Bristol, BS1 4NT).

This screenshot shows the 'Sign in' page on the GOV.UK Innovation Funding Service. It includes a 'Back' link, a beta notice, and two main options: 'Used this service before?' with a 'Sign in' button, and 'New to this service?' with a 'Create account' button. The 'Sign in' section contains fields for 'Email address' and 'Password', both with placeholder text and input boxes. A 'Show' button is next to the password field. Below the sign-in fields, there is a link for 'Need help signing in or creating an account?'. Under this link, a message states 'My email and/or password isn't working' and 'If you applied previously using the old service, you will need to create a new account.' A link for 'Forgotten your password?' is also present and circled in red.



# Project Details

- **Application Team** - Collaborators can invite organisations who you are working with on the project. Contributors can invite colleagues from your own organisation to help you complete your application. All team members and Lead applicants must complete the Equality, Diversity and Inclusion survey embedded in IFS as part of your application.
- **Application Details** - Title, timescales, research category, innovation area and previously submitted application (y/n)
- **Subsidy basis** - Will the project, including any related activities, you want Innovate UK to fund, affect trade between Northern Ireland and the EU? All participants must complete this section.
- **Project Summary** - Short summary and objectives of the project including what is innovative about it
- **Public Description** - Description of your project which will be published if you are successful
- **Scope - How does your project align with the scope of this competition?** - If your project is not in scope, it will be ineligible for funding

# Application Questions

Detailed guidance  
available on IFS

Application Form		Appendix?
Question 1	Applicant location (not scored)	No
Question 2	Farmers and Growers location (not scored)	No
Question 3	Equality, Diversity and Inclusion (not scored)	No
Question 4	Need or challenge	No
Question 5	Approach and innovation	Yes - optional
Question 6	Team and resources	Yes - optional
Question 7	Market awareness	No
Question 8	Outcomes and route to market	No
Question 9	Wider impacts	No
Question 10	Project management	Yes - mandatory
Question 11	Risks	Yes - mandatory
Question 12	Added value	No
Question 11	Costs and value for money	No

# Application finances



Innovate  
UK



# To claim funding

Your business does not have to be UK registered with Companies House when you apply but it must be registered before you can receive funding.

You are unable to claim funding if:

- you are an overseas organisation, so your company number begins with FC
- your organisation is setup as a branch, so your company number begins with BR
- you are a collaboration with no formal structure of ownership or control, so your company number begins with ML
- you are a Crown Dependency:
  - if your company is based in Jersey, your company number begins with JE
  - if your company is based in Guernsey
  - if your company is based in the Isle of Man



# British Overseas Territories

You are also unable to claim funding if your company is based in any of the British Overseas Territories (BOTs):

- Anguilla
- Bermuda
- British Antarctic Territory
- British Indian Ocean Territory
- British Virgin Islands
- Cayman Islands
- Falkland Islands
- Gibraltar
- Montserrat
- Pitcairn Islands
- Saint Helena, Ascension and Tristan da Cunha
- South Georgia and the South Sandwich Islands
- Turks and Caicos Islands

# Your Project Cost Categories



Labour



Overheads



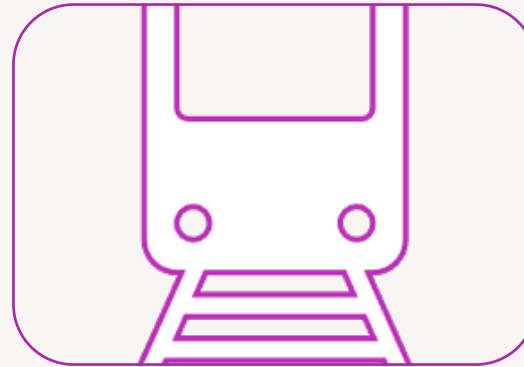
Materials



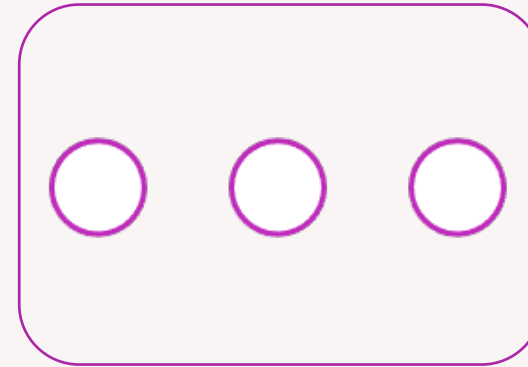
Equipment  
Usage



Subcontractors



Travel &  
Subsistence



Other

# Labour

## Costs supported:

- Roles and number of days spent working on project(time sheets required)
- 262 work days per annum(less Public holidays and entitlement)
- paid by PAYE
- Employers NI, annual salaries, pension, Health insurance

## Costs not supported:

- Dividends & bonuses
- Holiday(excluding that mentioned in eligible costs)
- Training days
- Names not roles assigned to project costs

Labour

£25,862

You can claim the labour costs of all employees you have working on your project.

► [Labour costs guidance](#)

If your application is awarded funding, you will need to account for all your labour costs as they occur. For example, you should keep timesheets and payroll records. These should show the actual hours worked by individuals and paid by the organisation.

Working days per year

Number of staff and roles within the project

Role within project	Gross employee cost	Rate (£/day)	Days to be spent by all staff at this grade	Total costs	
<input type="text" value="Project Manager"/>	<input type="text" value="50000"/>	£216	<input type="text" value="120"/>	£25,862	<a href="#">Remove</a>
<input type="text"/>	<input type="text" value="0"/>	£0	<input type="text" value="0"/>	£0	<a href="#">Remove</a>

[Add another role](#)

Total labour costs £25,862

# Material costs

## Costs supported

Off the shelf items via 3<sup>rd</sup> Party suppliers

Items from stock with the replacement of items invoice (used as evidence of supply)

## Costs not supported

Whole bulk buy invoices, when only partially used with project work

Items from stock that aren't being replaced

Equipment treated as assets

### Materials

£10,000 —

You can claim the costs of materials used on your project providing:

- they are not already purchased or included in the overheads
- they are purchased from third parties
- they won't have a residual/resale value at the end of your project. If they do you can claim the costs minus this value

[Please refer to our guide to project costs for further information.](#)

► [Materials costs guidance](#)

Please provide a breakdown of the materials you expect to use during the project

Item	Quantity	Cost per item (£)	Total	
Software	1	10000	£10,000	<a href="#">Remove</a>
	0	0	£0	<a href="#">Remove</a>

[Add another materials cost](#)

Total materials costs **£10,000**



# Subcontractors\*

## Costs supported

Justification required if non-UK supplier chosen

Independent contractor via 3<sup>rd</sup> Party suppliers

Linked supplier must be charged at cost

Description of work covered

## Costs not supported

Intercompany uplifts or profits

Overseas contractors, if UK contractor available-  
without justification

You can subcontract work if you don't have the expertise in your project team. You can also subcontract if it is cheaper than developing your skills in-house.

► [Subcontracting costs guidance](#)

Please provide details of any work that you expect to subcontract for your project.

Subcontractor name

Robotics experts ltd

Country where the subcontractor will work

UK

Role of the subcontractor in the project and description of the work they'll do

facilitation and availability of robotics labs

Cost

36795

\*You will be required to provide invoices and a description of work

# Travel and subsistence\*

## Costs supported

Rail, Car or Plane\*\*

Mileage at HMRC rate

Hotel (Bed and Breakfast)

Reasonable food costs(overnight stay only)

## Costs not supported

Fuel

First class travel

Entertaining or marketing

Visas

Unreasonable food costs(overnight stay only)

**Travel and subsistence** £ 3,000 ▲

You should include travel and subsistence costs that relate to this project.

Purpose of journey or description of subsistence cost	Number of times	Cost each (£)	Total (£)	
Travel to robotics labs for testing	12	100	£ 1,200	<a href="#">Remove</a>
monthly project meetings	12	150	£ 1,800	<a href="#">Remove</a>

[Add another travel cost](#)

Total travel & subsistence costs £ 3,000

\*You will be required to provide vouchers, tickets and invoices and \*\* must provide number of people travelling, the destination and purpose of visit

# Overheads

**Innovate UK's included costs are those incurred as a direct result of the project**

## Costs supported

Additional costs for administrative staff  
Day to Day Calculation for those people listed in the Labour Costs Table, multiplied by the numbers of days working on the project work.

## Costs not supported

Excessive costs of Senior Managers only overseeing project activities  
Business as usual day to day rates for Administration  
Uplifts of any kind

### Overhead costs

£ 44,483 ▲

You can incur overhead costs associated with those directly working on the project as well as indirect (administration) overheads. To be eligible both overhead categories need to be directly attributable to the project. The indirect overheads need to be additional as well as directly attributable. Note that there are certain cost categories/activities which are not eligible. To find out which costs are ineligible/eligible refer to our [project costs guidance](#).

► [Overheads costs guidance](#)

- ☐ No overhead costs
- ☒ 20% of labour costs
- ☐ Calculate overheads

### Calculate overheads

If you feel your overheads are higher than 20% you may calculate a value using the Innovate UK model in the spreadsheet available below. The model shows you which types of indirect costs associated with your project you may claim. For support with this option, please contact our Customer Support Service on 01793 44 2700. Any value claimed under this model will be subject to a review. This will assess the appropriateness of your claim if your grant application is successful.



#### Download the overhead calculation spreadsheet

Download as an Excel document [overhead calculation spreadsheet.xlsx \(16KB\)](#)

Download as an Open Office document [overhead calculation spreadsheet.ods \(10KB\)](#)

#### Upload your completed spreadsheet

No file currently uploaded

+ Upload

# Capital equipment usage\*-

## Costs supported:

Usage costs for the period of use  
A justification if greater than expected  
Depreciation charge is included

## Costs not supported

Purchase price of equipment  
Usage costs for the whole of the project period  
if only used for part of the time

100% write down within the project timeline\*\*

\*Please provide your Fixed Asset Register

\*\*If not applicable

Capital usage	£750 —
You can claim the usage costs of capital assets you will buy for, or use on, your project.	
<a href="#">▶ Capital usage guidance</a>	
Please provide a breakdown of the capital items you will buy and/or use for the project.	
Item description	
<div>Laptop</div>	
New or existing item	
<input checked="" type="radio"/> New <input type="radio"/> Existing	
Depreciation period (months)	
<div>24</div>	
Net present value at the start of your project or the price you bought it for (£)	
<div>2000</div>	
Residual value at end of project (£)	
<div>500</div>	
Utilisation (%)	
<div>50</div>	
Net cost	
£750	



# Other\*

## Costs supported

Facility usage\*\*  
Licence fees(or appropriate proportion)  
Miscellaneous(not covered in other categories)  
Quality certification\*\*\*  
Specific PPE  
Dissemination costs

## Costs not supported

Facility charge rates  
Marketing  
Trademark  
Undefined mixed costs  
Contribution in kind  
Business as usual costs

\*You will be required to provide invoices and basis of daily rates

\*\*At daily or hourly cost

\*\*\*Where required for sign off

**Other costs**£ 0 ▲

Please provide details of any project costs which cannot be covered by the other cost categories.

► [Other costs guidance](#)

Please note that legal or project audit and accountancy fees are not eligible and should not be included as an 'other cost'. Patent filing costs of new IP relating to the project are limited to £7,500 for SME applicants only. Please provide estimates of other costs that do not fit within any other cost headings.

Description and justification of the cost	Estimated cost (£)
<div></div>	<div>0</div>

[Add another cost](#)

# Funding

## Funding rules

The level of funding awarded will depend upon the type of organisation and the type of research being undertaken in the project

Funding is calculated by project participant

IFS will advise the maximum grant % you can request based upon your answers to:

- type and size of organisation
- research category defined by the lead applicant in the Application Details section of the application



Organisation or type of activity	industrial research	Experimental development
Business (economic activity)	Micro or Small – 70% Medium – 60% Large – 50%	Micro or Small – 45% Medium – 35% Large – 25%
Research organisation (non-economic activity)	Universities – 100% (80% of Full Economic Costs)  Other research organisations can claim 100% of their project costs	Other research organisations must: <ul style="list-style-type: none"> <li>• be non-profit distributing and</li> <li>• disseminate the project results and</li> <li>• explain in the application form how this will be done</li> </ul>
Public Sector Organisation or Charity (non-economic activity)	100% of eligible costs	Must: <ul style="list-style-type: none"> <li>• be performing research activity and</li> <li>• disseminate project results and explain in the application form how this will be done</li> <li>• ensure that the eligible costs <u>do not include work / costs already funded</u> from other public sector bodies</li> </ul>
Research organisations (undertaking economic activities) Organisations receive funding related to the size of their organisation	Micro or Small – 70% Medium – 60% Large – 50%	Micro or Small – 45% Medium – 35% Large – 25%

# Academic partners



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UK



# Why Je-S?

We use the Research Councils' Joint Electronic Submission System (Je-S) to collect academic finances.

The Je-S system automates the collection of Full Economic Costs (FEC) based costs from academic partners and tells them exactly what numbers should be used in the application form for their costs.

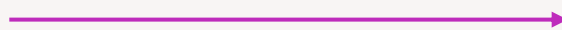
Also to collect project finance details from non-HEIs (e.g. RTOs) that are claiming they are carrying out academic quality work and want to be funded on an FEC basis.

Using Je-S means that Innovate UK follows standard Research Council guidelines on funding universities and enables Research Councils to easily co-fund Innovate UK projects.

**The Je-S system is completely separate from Innovate UK and we cannot advise on its usage.**

# Project costs – academic partners

Enter the TSB reference number here



Enter the TSB Contribution column figures from *your* J-eS output document into the project costs section of the application.

Upload the Je-S with council status form as a PDF at the bottom of the screen.

**Any queries, contact Je-S Helpdesk (not Innovate UK)**

- [jeshelp@je-s.ukri.org](mailto:jeshelp@je-s.ukri.org)
- 01793 444164

## TSB reference

This number is found at the top of your Je-S form

My REF

## Financial resources

Please enter the following costs from the summary of resources section on your Je-S form

Directly incurred	TSB Contribution (please refer to the TSB contribution column)
Staff	11
Travel & subsistence	22
Other costs	33
<b>Subtotal</b>	£ 66
<b>Directly allocated</b>	
Investigators	44
Estates Costs	55
Other costs	66
<b>Subtotal</b>	£ 165
<b>Indirect costs</b>	77
<b>Exceptions</b>	
Staff	88

# Submitting your application



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# Checking your finances are complete

## Finances Summary

The following organisations have not marked their finances as complete:

- EMPIRE LTD



[Return to the finances section to complete your finances](#)

This application cannot be submitted unless finances have been marked as complete by all partners.

		Total costs	% Grant	Funding sought	Other public sector funding	Contribution to project
<b>Barry Shaw Experts Ltd</b> Partner	✓	£230,162	70%	£161,113	£0	£69,049
<b>EMPIRE LTD</b> Lead organisation	⚠	£282,655	70%	£197,859	£0	£84,797
<b>University of Bath</b> Partner	✓	£239,114	0%	£0	£0	£239,114
<b>Total</b>		£751,931		£358,972	£0	£392,959

All organisations have marked their finances as complete.

Research organisation participation is no greater than **30%** of the total project costs.

**IFS DOES NOT VALIDATE TOTAL PROJECT COSTS**

# Editing a submitted application

**test**  
Application number: 242  
Competition: 599 Covid de minimis round 2

Awaiting assessment

**Application submitted**  
[Reopen](#)


Reopen by clicking here

**Terms and conditions**  
You must agree to these before you submit your application.

[Award terms and conditions](#)

✓ Complete

Review and submit

 [Print your application](#)

Remember to press  
'Submit application'

**Terms and conditions**

Open all

Award terms and conditions

✓ Complete +

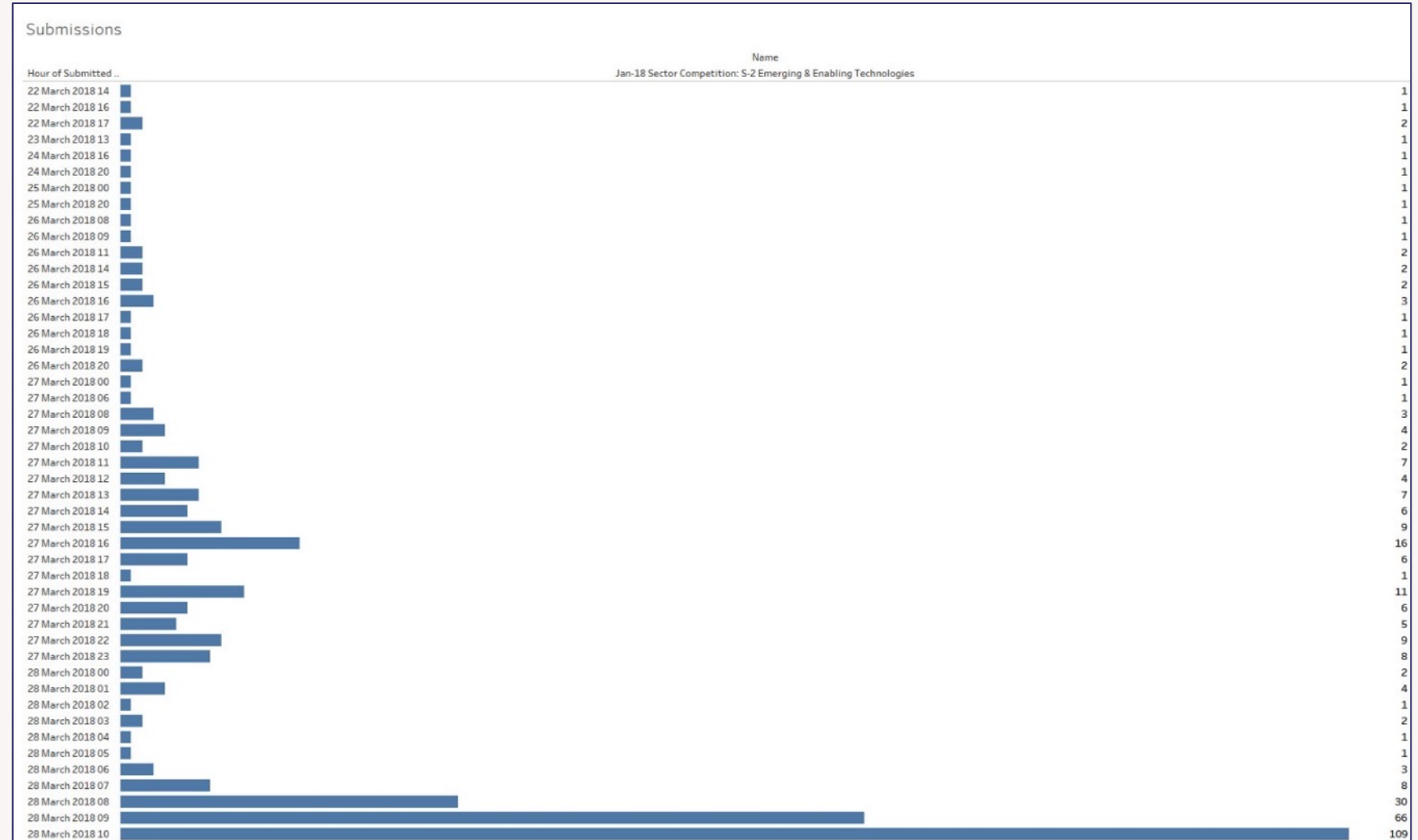
Submit application

**Need help with this service?** [Contact us](#)



# Submit your application early!

Customer Support can help resolve any issues you might have when submitting but only if they are contacted before the deadline. Once the deadline has passed, your application cannot be submitted.



# Assessment



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UK



# How do our assessors assess?

- <https://www.youtube.com/watch?v=nHZNpRSwgeI>



# How are successful applications selected for funding?

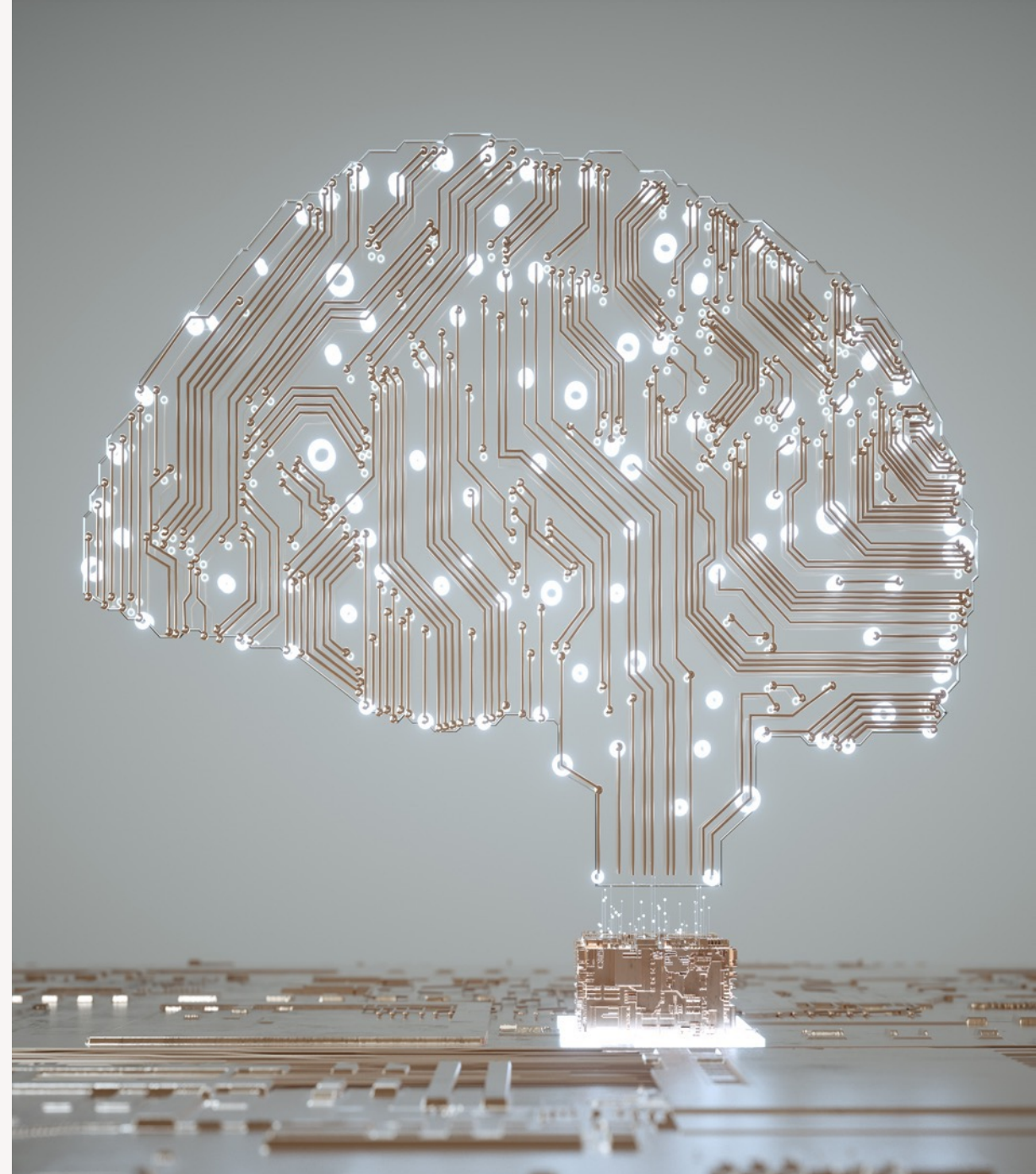
- <https://www.youtube.com/watch?v=xyHggGjxeCU>



# Project setup for successful applicants



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UK





# Notification

## If you are unsuccessful in this competition

You can use the feedback from the assessors to develop your idea and apply into another competition that allows previously submitted applications

## If you are successful in this competition

- you will be assigned a Delivery Executive who will guide you through the Project Set Up process
- you will have 7 days to complete the project team, project details and bank details
- you will then have **90** days to complete project set up – funding may be withdrawn if this is not completed within this timeframe

**Please ensure all your contact details in the IFS portal are correct and up to date and that you regularly monitor it.**

# Project set up

- All communication will be through IFS.
- Lead applicant must provide collaboration agreements and exploitation plans if applicable.
- Any partners with individual total project costs of **up to** £50,000 must provide evidence with a Statement of Expenditure (SoE).
- Any partners with individual total project costs **above** £50,000 must provide evidence with an Independent Accountants Report (IAR).

# Project delivery

- All grants are paid **quarterly** in arrears and are only paid following **quarterly** reporting and necessary audits.
- Claims can only be made for costs incurred and paid between the project start and end dates.
- Monitoring of the project includes a visit from the appointed Monitoring Officer.

# Additional Support



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# Innovate UK EDGE

*Bespoke growth and scaling support at the business end of innovation*

- Intensive growth and scaling support tailored to the needs of each of our ambitious innovation-driven clients
- Offered alongside project funding to Innovate UK award winners, most of whom engage us. We are also available to all high growth potential innovative small or medium-sized businesses\*
- Engagement at early, growth and scaling stages, with our core high growth service and enhanced Scaleup Programme
- Delivered by 290 innovation and growth specialists embedded in regional ecosystems across the UK, including a board of expert scaleup directors

*\*subject to eligibility and currently in all nations and regions outside Scotland*

# Innovate UK EDGE

An innovation and growth specialist, or scaleup directors, work with a company's leadership to hone its commercial strategy and help it take targeted action to, for example:

- Build investment readiness
- Manage innovation effectively
- Enter global markets
- Providing local to national to international growth and scaling support





# Innovate UK EDGE

- <https://www.youtube.com/watch?v=Bc2K0E4IBEM&list=PLrMOhOrmeR6nWrhJbwfwQ0F1njVRsSh7b&t=8s>



# Equality, Diversity & Inclusion

- We are on a mission to embed Equality, Diversity, and Inclusion in everything we do, internally and externally.
- We believe that great ideas can, and do, come from anyone and everyone.
- We know that diversity and inclusion in businesses contributes to enhanced innovation, satisfaction, performance, and ultimately, commercial success.



# Available Support

- We welcome and encourage applications from people of all backgrounds and are committed to making our application process accessible to everyone.
- This includes providing support for people who have a disability or long-term condition and face barriers applying to us.
- So, if you would like any support, please contact our Customer Support Service Team on [support@iuk.ukri.org](mailto:support@iuk.ukri.org) or at **0300 321 4357**.





# What to Expect

1.

Contact our Customer Support Services Team as early as possible – we suggest at least 15 working days before the deadline

2.

Complete a request form which will be sent to our partner Diversity & Ability (D&A)

3.

D&A will conduct a Discovery Conversation with you and make reasonable adjustments recommendations

4.

D&A will organise and deliver bespoke reasonable adjustments for and with you

5.

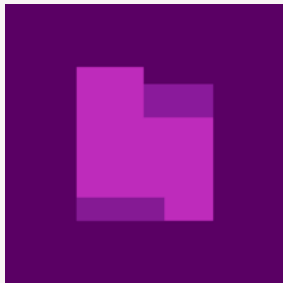
Submit your application – please do so well ahead of the deadline as extensions cannot be provided

# Contact

## Customer Support Services

0300 321 4357 (Monday - Friday 9-5pm)

[support@iuk.ukri.org](mailto:support@iuk.ukri.org)



**Innovate UK**

[ukri.org/councils/innovate-uk](https://ukri.org/councils/innovate-uk)



**Innovate UK KTN**

[ktn-uk.co.uk](https://ktn-uk.co.uk)



**Innovate UK EDGE**

[innovateukedge.ukri.org](https://innovateukedge.ukri.org)





# Q&A



# Farming Futures: Automation and Robotics Support

- Book a 15 min one-to-one meeting to discuss your queries and project with a member of the IUK KTN AgriFood team.

<https://calendly.com/d/zj5-3bj-ntg/farming-futures-automation-and-robotics-support>



### Farming Futures: Automation and Robotics Support

🕒 15 min

Book a 1:1 meeting with a member of the KTN AgriFood team to discuss your queries related to the Farming Futures: Automation and Robotics competition.

[Cookie settings](#)


#### Select a Date & Time

January 2023

MON	TUE	WED	THU	FRI	SAT	SUN
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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

**Time zone**

🌐 UK, Ireland, Lisbon Time (10:26pm) ▼

 Troubleshoot

POWERED BY  
Calendly

# Collaboration database



## Farming Futures: Automation and Robotics

Collaboration Database

January 2023

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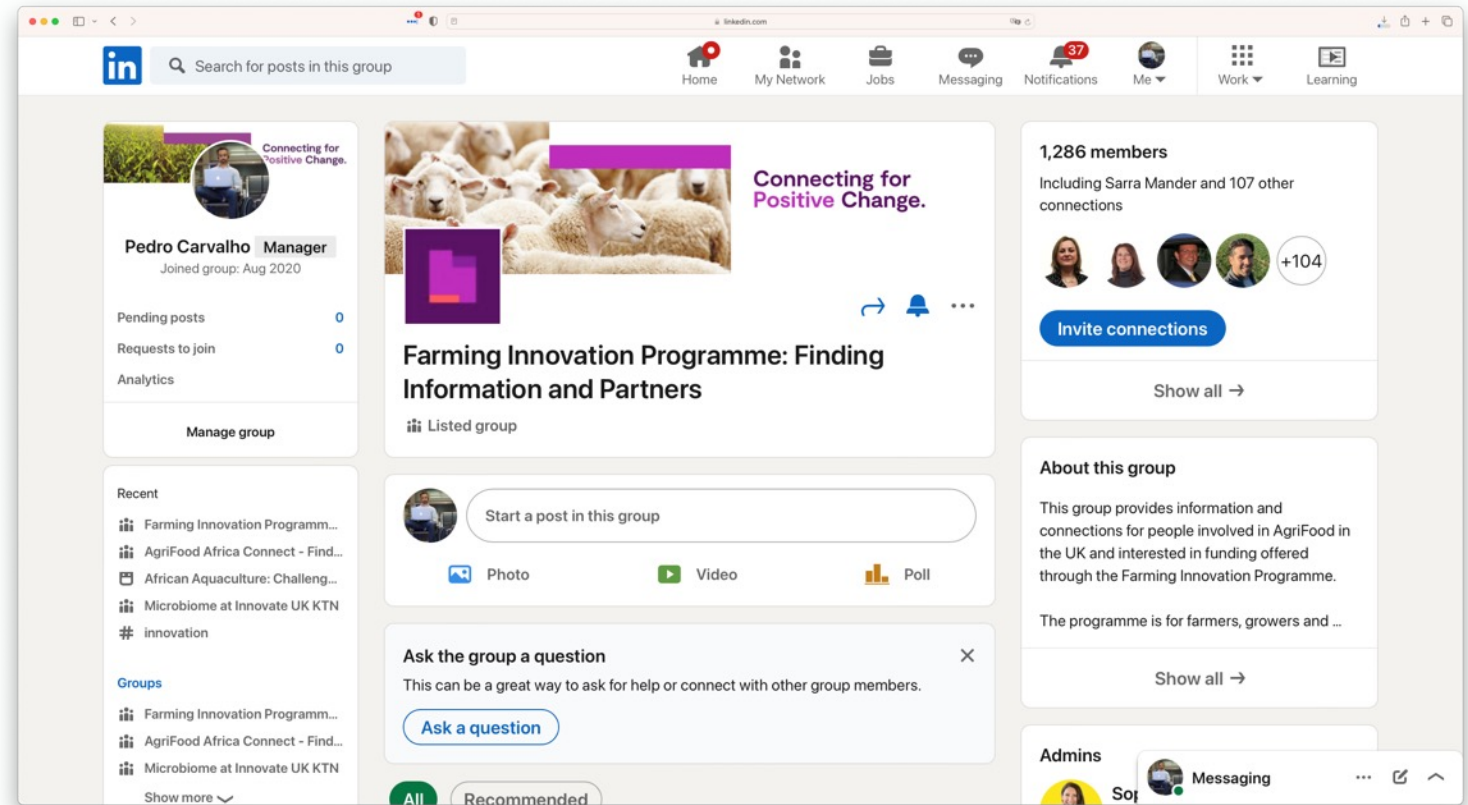
[Data management](#)

[Systems for automated on-farm processing and packing](#)

[Other](#)

# LinkedIn – Farming Innovation Programme: Finding Information and Partners

- Innovate UK KTN have an established managed LinkedIn group:  
<https://www.linkedin.com/groups/13773250/>
- Please join this group and use it to build consortia as per the group rules.
- Currently 1,200 plus members.
- Be clear on what you want or can offer.



# Thank you

[simon.baty@iuk.ktn-uk.org](mailto:simon.baty@iuk.ktn-uk.org)

[pedro.carvalho@iuk.ktn-uk.org](mailto:pedro.carvalho@iuk.ktn-uk.org)





# Lunch break

We'll be back at 1:30pm

[simon.baty@iuk.ktn-uk.org](mailto:simon.baty@iuk.ktn-uk.org)

[pedro.carvalho@iuk.ktn-uk.org](mailto:pedro.carvalho@iuk.ktn-uk.org)



# Consortia Building Session

18<sup>th</sup> January 2023  
13:30 – 15:30

**Simon Baty**, Knowledge Transfer Manager, Agrifood

[www.ktn-uk.org](http://www.ktn-uk.org)



**Innovate UK**  
KTN

# Agenda

13:30 – 13:35	<b>Welcome and overview of the event</b>	Simon Baty, IUK KTN
13:35 – 14:05	<b>Breakout Room – Round 1</b>	Facilitated by IUK KTN
14:05 – 14:20	<b>What makes a strong consortium</b>	Simon Baty, IUK KTN
14:20 – 14:50	<b>Breakout Room – Round 2</b>	Facilitated by IUK KTN
14:50 – 15:00	<b>Event Closes</b>	Pedro Carvalho, IUK KTN

# Breakout Rooms

- 25min random breakout room
- Turn on camera and mic
- Introduce yourself: name and organisation
- Brief description of what are you looking for

# Networking is normal

- How do you find a plumber or a restaurant?



# **“Networking is more about farming than it is about hunting”**

**Ivan Misner - BNI**

[www.ktn-uk.org](http://www.ktn-uk.org)



**InnovateUK**  
KTN

## Collaboration is encouraged

- Read the competition brief, collaboration is required
- Projects that partners that cover a supply chain are generally stronger
- Think about how you will engage English farmers

# You have a great consortium – what could go wrong?

- Who owns what? You will need a consortium agreement, so start early  
<https://www.gov.uk/guidance/university-and-business-collaboration-agreements-lambert-toolkit>
- Collaborate in all aspects of the bid. No passengers, use tools and functionality of IFS – check everyone knows what they get and how much they have to contribute
- Check the number of bids you can be part of
- Too many or too few partners
- Sub contracts

# Eight Hallmarks of a Good Application

1. Alignment to the competition scope
2. Innovation
3. Strong business case
4. Convincing value proposition
5. Credible R&D plan
6. Right consortium
7. Clear need for support
8. The right kind of risk

## Tops tips – part one



**Agree key points  
of the  
collaboration  
EARLY**



**Explicitly  
answer all sub-  
questions**



**Use appendices  
where available**



**Don't assume  
assessors are  
experts in your  
area**



## Top tips – part 2



**Quantify and  
justify  
assertions**



**Check all  
deadlines and  
event dates**



**Start discussing,  
planning and  
writing ASAP**



**Remember risk  
and innovation –  
you need both**



**Most importantly**

Write a proposal that excites and inspires

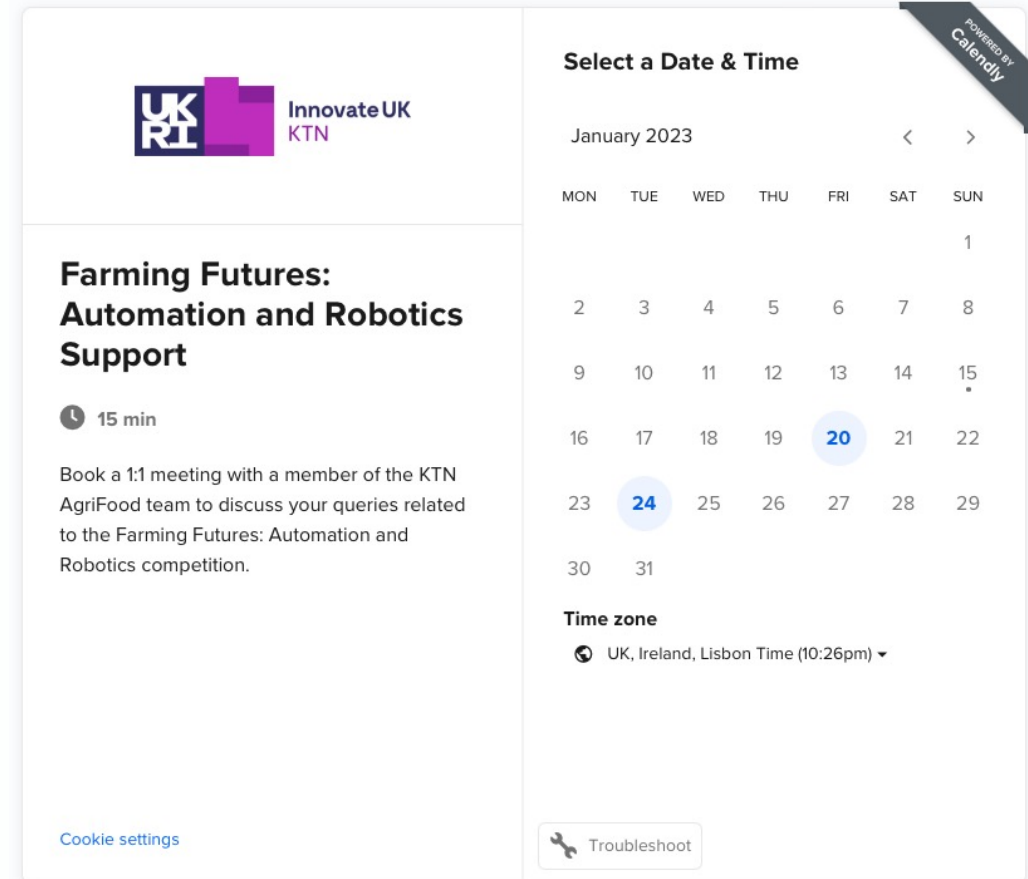
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The screenshot shows a Calendly booking interface. On the left, the header includes the UKRI and Innovate UK KTN logos. The main title is 'Farming Futures: Automation and Robotics Support', followed by a '15 min' duration icon and text: 'Book a 1:1 meeting with a member of the KTN AgriFood team to discuss your queries related to the Farming Futures: Automation and Robotics competition.' At the bottom left of this section are links for 'Cookie settings' and 'Troubleshoot'. On the right, the 'Select a Date & Time' section shows a calendar for January 2023. The days of the week are listed at the top. The calendar grid shows dates from 1 to 31. The 20th and 24th are highlighted with blue circles. Below the calendar, the 'Time zone' is set to 'UK, Ireland, Lisbon Time (10:26pm)' with a dropdown arrow. A 'Powered by Calendly' badge is in the top right corner.

**UKRI** **Innovate UK**  
**KTN**

### Farming Futures: Automation and Robotics Support

🕒 15 min

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January 2023 < >

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Powered by Calendly

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## Farming Futures: Automation and Robotics

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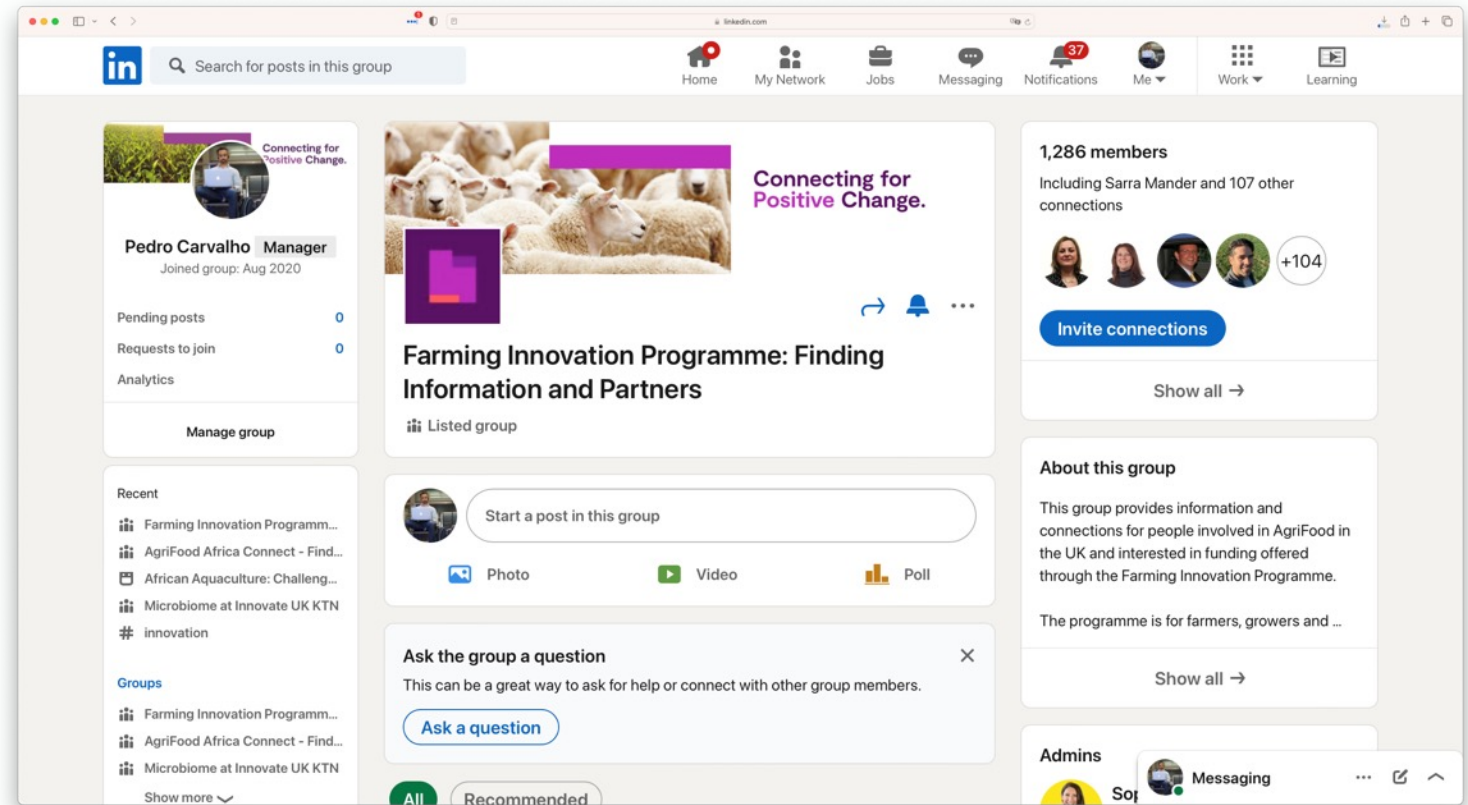
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