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# Welcome, we will begin the webinar shortly

**Small-satellite missions sandpit webinar**

**3 November 2026**

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# Small-satellite missions sandpit: UKRI Space Programme

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Jenny Morris, Senior Portfolio Manager

**Slides and recording of the webinar will be provided after the event**

# Agenda

1 The opportunity and UKRI Space Programme

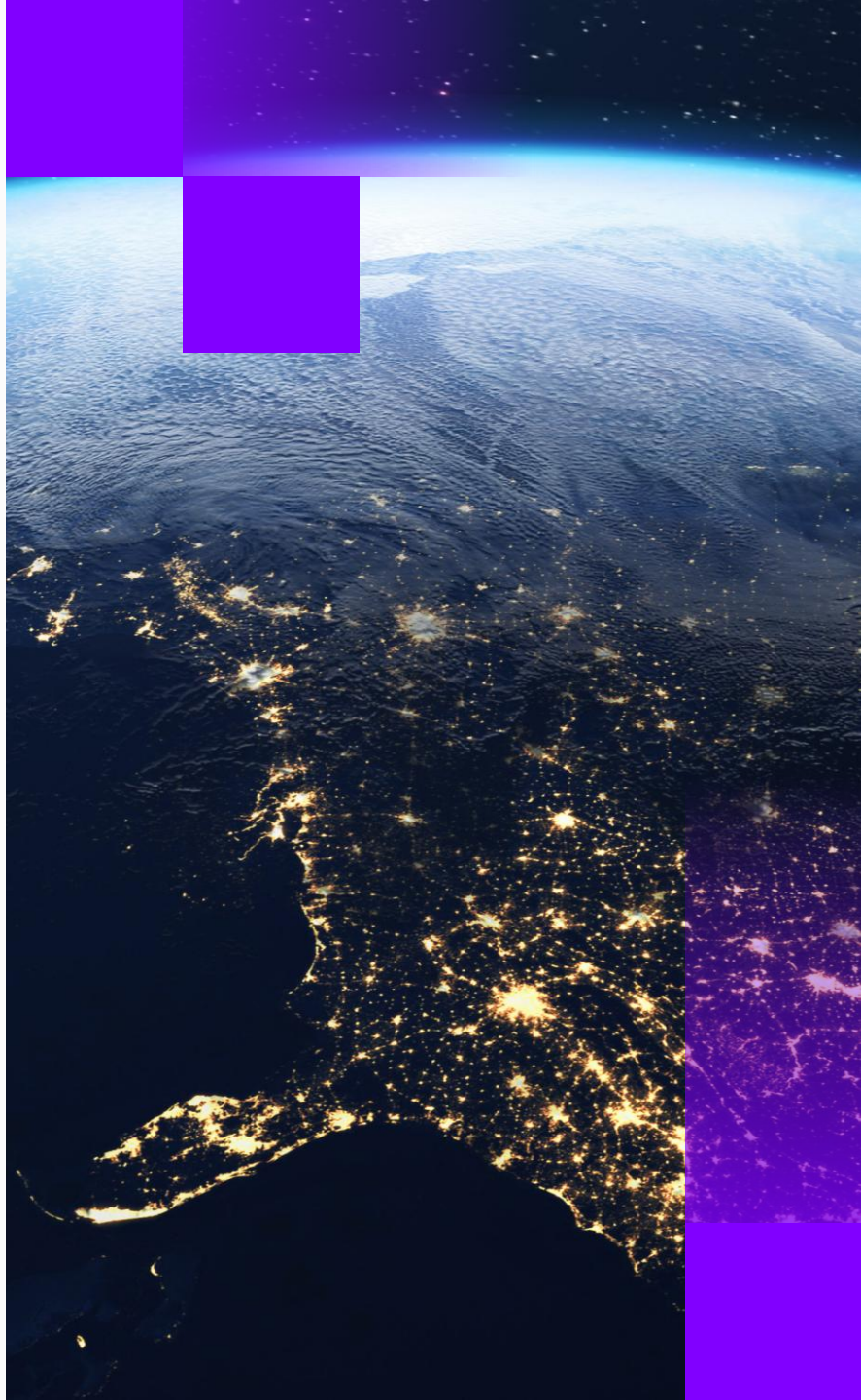
2 What we are looking to achieve and what success might look like

3 Opportunity timeline and sandpit process

4 Who we are looking for & how to apply

5 Questions and answers

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# Small-satellite Earth observation mission concepts

**Developing the next generation of UK Earth observation capabilities**

The UK faces increasingly complex challenges relating to national security and defence, environmental monitoring and resilience, and society and economic growth.

Future Earth observation capabilities have the potential to transform how we understand, monitor and respond to these challenges.

This opportunity aims to bring together the Earth observation, space, and enabling technology communities to **develop ambitious small-satellite mission concepts that address real-world challenges and strengthen UK sovereign capability.**

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# Why now?

- **Growing demand** for timely and actionable Earth observation data and information products
- **Strategic need** for sovereign and resilient Earth observation capability to support UK priorities.
- **Technological advances** in enabling technologies such as AI and quantum technologies are creating new opportunities for satellite capabilities
- **UKRI priorities** aligned with UK Space strategy, National Security and Defence priorities and the government's Industrial Strategy.

The **UKRI Space Programme** is investing in Earth observation and data, platforms and small satellites, to strengthen the UK's research and innovation foundations in the space sector.

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# The opportunity

- Be part of a challenge-led process that will explore ambitious new ways in which small-satellite Earth observation capabilities could address real-world challenges.
- Develop new collaborations with people you would not typically work with, in a creative environment designed to encourage new ways of thinking.
- Work directly with stakeholders from government, industry and user communities to address real-world challenges.

~30 participants selected for sandpit.

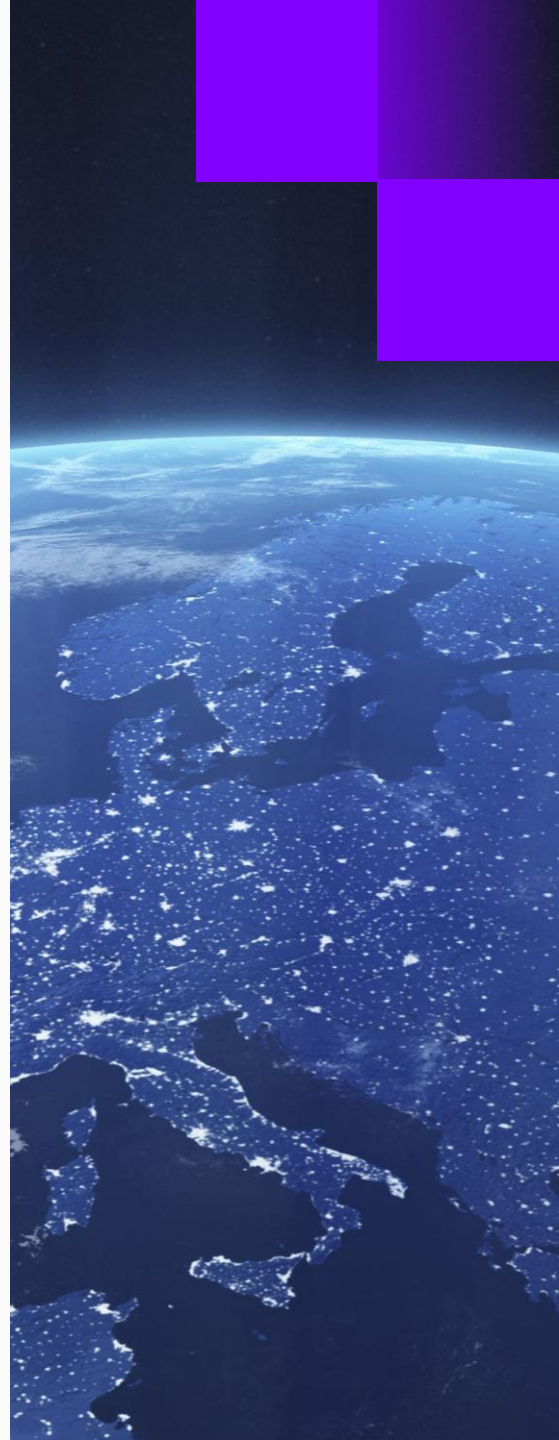
5-6 projects invited to submit applications.

£1.87m total funding available UKRI fund 80% FEC

11-month pump-priming projects.

Potential for follow-on funding.

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# What are we looking to achieve?

## Mission concepts leading to future capabilities

**'Phase 0' studies** will explore:

- user requirements & mission objectives
- innovation solutions to challenges
- mission feasibility
- capability and readiness gaps
- payload and instrument configurations
- platform and orbital options
- data-streams and information products

## Better data

faster, more efficient, effective and affordable production of data for commercial and government applications from future constellations of small satellites

## Better decisions

expanded usability of data products
advances in onboard filtering, real-time alerts and constellation collaboration

## Stronger UK capability

secure, assured, UK-owned and operated, nationally separable capability

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# What might success look like?

### Challenge-led

- Mission concepts that are driven by clearly defined user needs and real-world challenges, rather than being centred on a particular technology
- Addresses national security and defence, environmental, societal or economic needs

### Collaborative

- Co-developed by new collaborations between space and adjacent technology communities
- Combines different perspectives, capabilities, methodologies or approaches
- Brings together partners from academia, industry, government or the third sector

### Ambitious

- Innovative concepts rather than incremental improvements
- Whole system thinking, from sensor technology to information products
- Investigates mission feasibility and identifies future opportunities and capability gaps

# What is a sandpit?



A sandpit is a structured and interactive process that brings together people with different expertise to explore challenges, form new collaborations and develop ambitious ideas.

Participants work closely with stakeholders, mentors and facilitators in a creative environment designed to encourage new ways of thinking and develop concepts that would not typically emerge through conventional funding opportunities.



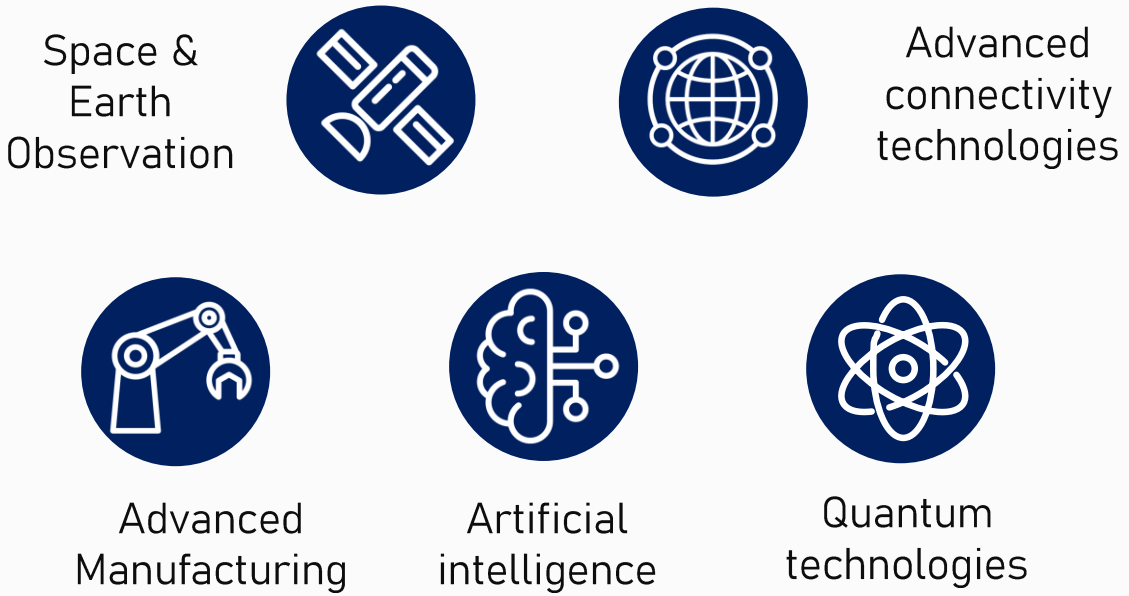
Interact and clarify → Create → Develop → Implement

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# Sandpit approach: bringing communities together

The sandpit approach enables:

- collaboration across disciplines which may not usually come together
- access to stakeholders who bring real-world challenges, operational needs and user perspectives into the process
- an interactive environment that encourages different ways of thinking




**We are looking to build new cross-disciplinary collaboration between space, enabling technologies and user communities to co-develop mission concepts.**

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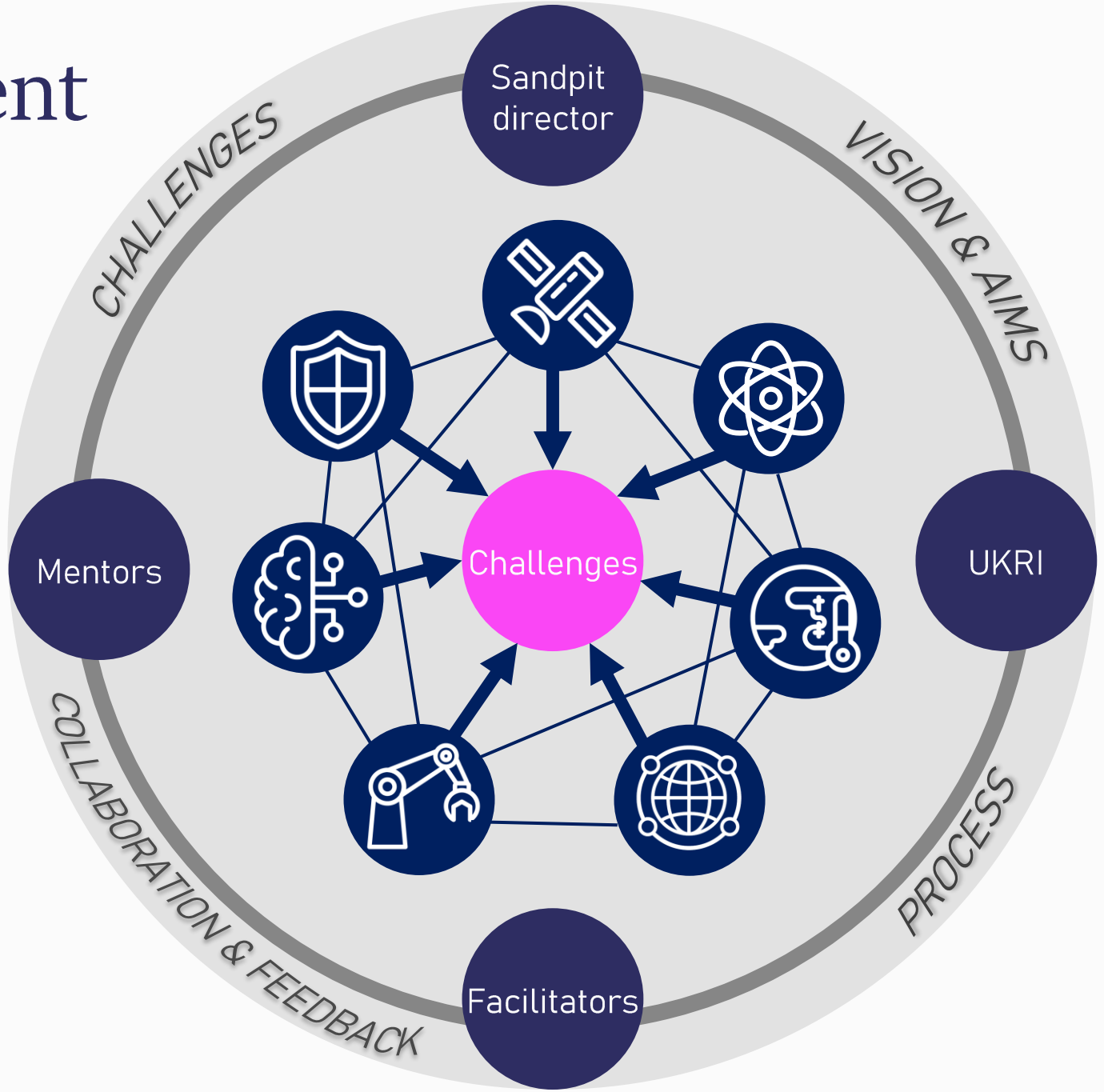
# The sandpit environment

- The **Director** and **UKRI** provide and vision and aims.
- **Stakeholders and mentors** bring the challenges, provide expertise and feedback.
- **Facilitators** co-design and guide the process.
- **Participants** from across a range of disciplines collaborate to co-develop concepts to address the challenges.

Project Partners

Your organisations

Your research teams




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# Sandpit participant journey

Dates and venue to be confirmed

| Week 1 | Week 2 | | | Week 3 | |
|---|---|---|---|---|---|
| **Day 1 Orientation (virtual)** | **Day 2 (virtual)** | **Day 3 (in-person)** | **Day 4 (in-person)** | **Day 5 (virtual)** | **Day 6 (virtual)** |
| • Introductions<br>• Process orientation<br>• How to prepare | • Building connections<br>• Exploring challenges<br>• Sharing language | • Creative ideas generation<br>• Exploring ideas and feedback | • Forming project teams<br>• Developing innovative ideas | • Shaping and refining ideas<br>• Peer feedback<br>• Reflection & development | • Assessment preparation<br>• Presenting concepts to the panel |

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UKRI will provide overnight accommodation and will reimburse travel, subsistence and childcare if it is outside of your normal arrangements.

# Who we are looking for

We welcome applicants from across UKRI's research and innovation communities and all career stages. You do not need prior space-sector experience.

**We are looking for people who can demonstrate:**

- the ability to develop innovative approaches to research
- the ability to work collaboratively and within an interdisciplinary environment
- the ability to communicate and engage with diverse non-academic stakeholders
- relevant research expertise and experience
- the ability to explain research to non-experts

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# How to apply

Submit an Expression of Interest via the UKRI Engagement Hub survey by:
**25 November 2026, 4:00 pm UK time**

Please ensure that your organisation is aware of your application and that UKRI will fund 80% of the full economic cost of the awarded projects.

**Important to note**

- Your organisation must have standard eligibility to apply to the sandpit; organisations without standard eligibility, including industry, can contribute as project partners
- Apply as an individual; you do not need a pre-formed team or project idea
- You must meet UKRI's individual eligibility as either a project lead or project co-lead
- Confirmation of selection is subject to appropriate security checks
- Full attendance is expected
- Attendance at the sandpit does not guarantee funding

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# Selection process

Applications will be reviewed by a selection panel comprised of the sandpit director, mentors and UKRI staff.

The selection panel will consider all responses collectively when assessing applications against the published criteria.

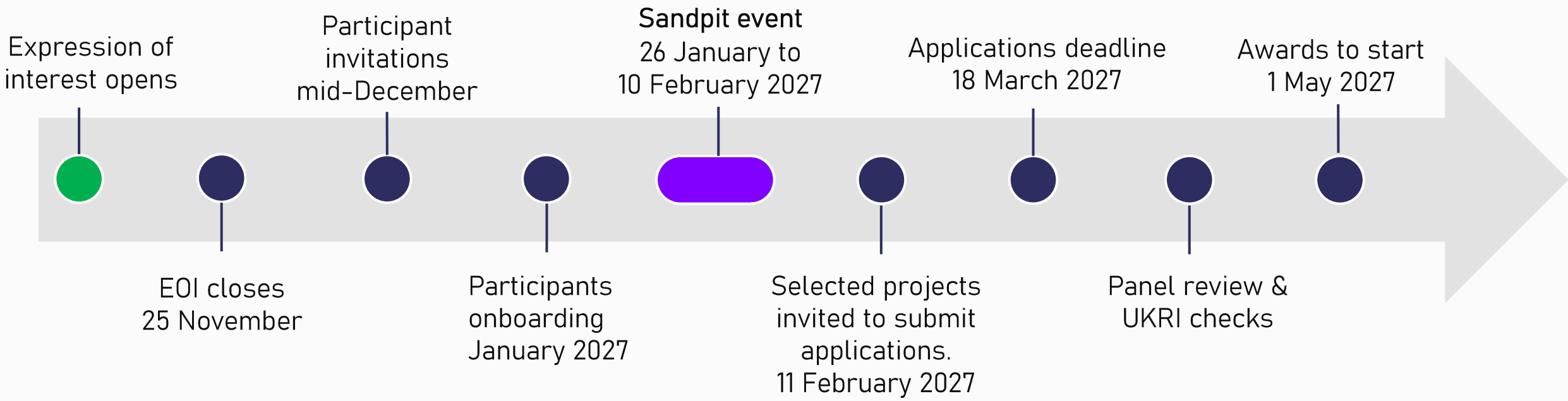
The panel will be selecting a cohort with a mix of skills, disciplines, backgrounds and career stages.  They will also reflect on the regional spread of participants' organisations.

There is no demand management in place, but UKRI reserves the right to modify the assessment process. We will not be able to give individual feedback to unsuccessful applicants.

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# The opportunity timeline




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# Next steps

- Slides and a recording of this webinar will be sent to registrants and published on the opportunity page
- Expression of Interest deadline: **25 November 2026 4:00 pm**
- Applicants will be notified of the outcome in mid-December 2026
- Successful participants should confirm attendance and complete a participant survey (including accessibility, dietary and other requirements) by **8 January 2027**
- Participants materials, agenda and joining instructions will be issued ahead of the first session
- Please ensure you are available for all sandpit sessions between 26 January and 10 February 2027

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# Questions and answers

Contact: smallsatsandpit@ukri.org