

Department for Science, Innovation & Technology

# MANCHESTER PRIZE

## **Innovator Handbook**

Version 1.0 7 December 2023





## **Introducing the Manchester Prize**

Throughout history, British innovators have been pivotal to the advancement of computer and information technology that has transformed the world we live in.

As we enter a new era where artificial intelligence plays an increasing role in the way we live, work, learn and enjoy ourselves, the UK is taking the lead in pioneering new AI solutions to some of the most important and difficult challenges in society.

The Manchester Prize is a new, innovation-focused initiative from the UK government.

It will award £1 million every year to innovators with the boldest and most cutting-edge solutions that use AI for public good.

Over the next two years, the first Manchester Prize is seeking innovation from UK-led teams with breakthrough ideas for overcoming challenges in the fields of **energy**, **environment and infrastructure**.

Up to ten finalist teams will receive £100,000 each in April 2024, alongside a range of support, including a package of compute, to develop their innovation.

One finalist will win a £1 million grand prize in early 2025.

Alongside the <u>Terms and Conditions</u>, this handbook sets out what you need to know to enter – and to win – the first Manchester Prize.



## Contents

Through this handbook, we will guide you through everything you need to know about the Manchester Prize, supporting you to enter the prize.

Introducing the Manchester Prize	2
Who's involved	4
Manchester Prize overview	5
What is the Manchester Prize?	5
Manchester Prize Timeline	5
What we're looking for	6
Challenge statement: what do I need to do to win?	6
Eligibility criteria: who can enter?	7
Judging criteria: how will winners be picked?	8
What you can win	9
Money	9
Compute	9
Match-making with partners	9
Data access	9
Entering the Manchester Prize	10
Entry process and guidance	10
Support to enter	11
Selection process	11

## Who's involved

The Manchester Prize is an initiative of the Department for Science, Innovation and Technology (DSIT) on behalf of HM Government.

Department for Science, Innovation, & Technology The Department for Science, Innovation & Technology exists to drive innovation that will deliver improved public services, create new better-paid jobs and grow the economy.

Our responsibilities include:

- positioning the UK at the forefront of global scientific and technological advancement
- driving innovations that change lives and sustain economic growth
- delivering talent programmes, physical and digital infrastructure and regulation to support our economy, security and public services
- R&D funding

This round of the Manchester Prize is delivered for DSIT by Challenge Works.



Challenge Works is a global leader in design and delivery of open innovation challenges that mobilise diverse, innovative thinkers to solve pressing problems and unlock change. Founded by Nesta, the UK's innovation foundation for social good, we are a social enterprise that has delivered 86 challenges to date and distributed more than £124 million to winning innovators.

## **Manchester Prize overview**

#### What is the Manchester Prize?

The Manchester Prize is a challenge prize funded by the Department of Science, Innovation and Technology. Challenge prizes are a unique approach to funding innovation, offering a series of incentives, with a final prize given to whoever can first or most effectively meet a defined goal. They are public, open competitions which lower barriers to entry to attract the broadest possible community of innovators.

Challenge prizes incentivise innovators to work towards a specific challenge, rather than being a reward for past achievements.

### The first Manchester Prize will be awarded to **the most innovative and impactful AI solution which demonstrates social benefit by overcoming challenges in the fields of energy, environment and infrastructure.**

#### **Manchester Prize Timeline**

The first Manchester Prize runs from December 2023 to March 2025, and will award a total of £2 million across two phases.



In the **entry phase**, opening on 7 December 2023, teams develop their ideas and proposals, working towards submitting their entry by the final deadline of 1 February 2024 at 12 noon (GMT). The entry phase culminates with up to ten entrants being selected as finalists, and each receiving an award of £100,000 in April 2024.

The **finalist phase**, which begins in April 2024, sees finalist teams developing their ideas into a working prototype. In addition to their £100,000 grant, teams will receive a range of non-financial support including a package of compute.

In January 2025, finalist teams will demonstrate their prototype and make a final submission to be considered for the grand prize. In March 2025, the best team in line with the judging <u>criteria</u> will be awarded the grand prize of £1 million.

## What we're looking for

#### Challenge statement: what do I need to do to win?

The challenge statement is a brief summary of what you have to create to win the Manchester Prize.

The first Manchester Prize will be awarded to the most innovative and impactful AI solution which demonstrates social benefit by overcoming challenges in the fields of energy, environment and infrastructure.	This is what you <b>must</b> <b>create</b> in order to win the prize.
<ul> <li>Solutions could include:</li> <li>Reducing energy costs for consumers by using AI to model household energy use and identify targeted interventions, such as retrofitting and replacement.</li> <li>Supporting emergency service response by bringing together a range of spatial data about the road and built environment to improve last mile routing.</li> <li>Improving the response to extreme weather conditions by using AI and earth observation data to predict areas vulnerable to flooding, or to support better real-time spatial data of events such as wildfires and flash floods.</li> <li>Reducing disruption to public services through predictive modelling of infrastructure resilience, with automated scheduling of maintenance, such as deploying teams to fix potholes or other traffic obstructions.</li> <li>Enhancing food security by using earth observation and soil data to monitor and improve farming productivity and crop yield.</li> <li>Improving efficiency and reducing resource consumption in manufacturing by using AI to optimise or automate energy-intensive processes.</li> </ul>	These are <b>examples</b> of how we think you could address the overarching statement (but we're hoping to be surprised - you're welcome to think of your own).
We encourage solutions that demonstrate advances in technical capabilities such as generalisation, uncertainty quantification, interpretability, data-efficient AI and physics-based AI.	This highlights the range of underlying AI technologies we are particularly interested in - but other approaches are welcome too.

#### Eligibility criteria: who can enter?

Challenge prizes are designed to be open to a wide range of organisations and individuals. What matters is the quality of your solution - not your profile or track record.

For your team to be eligible to enter the Manchester Prize, you must meet these requirements:

- **Eligible entrants:** Entries can come from individuals, companies and other organisations (e.g. non-profits, charities, research and technology organisations). In the case of individuals, the lead entrant must be at least 18 years of age.
- **Consortia entries:** Teams may enter as consortia of any combination of the above but must nominate one individual or organisation as the lead entrant. The lead entrant will enter into contracts and receive funding from the Manchester Prize. Organisations and individuals other than the lead entrant can be based outside of the UK.
- **Geographical scope:** The lead entrant must be based in the United Kingdom and be able to receive funds into a UK bank account in the name of the lead entrant.

In addition to these requirements, teams must pass due diligence checks, and teams which are led by an individual will need to have registered a legal entity and have a business bank account in place prior to receiving any finalist award.

You may submit as many entries as you wish, but one entry per lead organisation or individual will be selected as a finalist.

#### Judging criteria: how will winners be picked?

Up to ten finalists will be picked at the end of the entry phase, and one winner of the grand prize will be picked at the end of the finalist phase.

At both points, the successful teams will be selected based on five judging criteria. These are equally weighted.

The judging criteria are:

- **Innovation**: Teams should demonstrate how their solution is an innovation in artificial intelligence (AI), compared to what is the current state of the art. This may be innovation in the underlying AI, or in a novel application of an existing AI approach, or both (innovation in the business model, marketing or service design is not taken into account).
- **Impact:** Teams should clearly define what impact they aim to have and why they expect this to arise from their solution. The impact must relate to the challenge statement, but it does not need to align with any of the example use cases set out.
- **Long-term viability**: Teams should articulate why there is a credible path to adoption (commercial or non-commercial) for their solution, and what their plan is to pursue it.
- **Feasibility:** The team should show how their scientific and technical approach is appropriate and how the team has the capacity to deliver a working prototype by January 2025.
- **Safety and ethics:** The team should show they are taking action to showcase best practice in responsible AI.

## What you can win

The Manchester Prize provides a range of support to finalists, designed to give each team the greatest possible chance of success, and to enable them to develop their solutions as rapidly as possible, regardless of whether they win the grand prize.

#### Money

- Up to ten teams will be selected as finalists in April 2024, and receive £100,000 each.
- One team will be awarded the grand prize in March 2025, and receive £1,000,000.

Funding must be used on research and development related to your proposal, but you do not need to provide evidence of match funding, it is not a loan, we do not take any equity and you do not sign away rights to your intellectual property.

#### Compute

Throughout the finalist phase, teams will have access to a package of free compute to help develop their solutions. Further information on this will be announced during the entrant phase.

#### Matchmaking with partners

We will work with teams during the finalist phase to identify and convene key stakeholders in match-making sessions. Finalists will be given the opportunity to connect with problem holders and potential adopters in the public and private sectors, and investors at match-making events.

#### Data access

We will support finalists to identify, access and use open datasets. In the entry form, we ask entrants to specify what kind of data their proposal could benefit from. The type of support we can offer in the finalist phase will depend on the type of data requested but may include putting innovators in contact with organisations who generate and host data and can provide guidance on its use.

## **Entering the Manchester Prize**

#### Entry process and guidance

All entries should be made through the online form on the Manchester Prize website, <u>manchesterprize.org</u>, prior to the deadline, **1 February 2024 at 12 noon GMT**.

This needs to be filled in by the organisation or individual leading the team (the lead entrant).

It features:

- Questions about your team, so we know who you are and can check you are eligible;
- Questions about your needs, so we can understand how best to work with you if you are selected as a finalist;
- Questions about your solution, which we can assess against the judging criteria;
- An optional survey, so we can understand our entrants better.

A copy of the entry form is available to download to help you develop and collaborate on your entry prior to the deadline, but entries **must** be made through the online Submittable form at <u>manchesterprize.org</u>.

To access the entry form and submit an entry you will need to set up a Submittable account. Once you have started an entry you can save a draft and return to it at a later date to complete.

Before submitting your entry, please ensure that:

- You have read and understood the Manchester Prize <u>Terms and conditions</u> and <u>Privacy policy</u>;
- Your team meets the **eligibility criteria**.
- Your entry is aligned with the challenge statement and judging criteria;

ENTER NOW

#### Support to enter

We have endeavoured to make the entry process as simple as possible, but you may still have questions.

Join a webinar, where we will talk you through the information in this innovator handbook and have the opportunity to ask questions.

Sign up at <u>manchesterprize.org</u> or visit the website to watch a recording after the webinars have been delivered.

If you still have queries, contact the team on info@manchesterprize.org.

We are committed to making the entry process as accessible, efficient and practical as possible. If there are any reasonable adjustments that would support you entering, catering for any additional needs you may have, please contact <u>info@manchesterprize.org</u>.

#### **Selection process**

After the deadline at 12 noon (GMT) on 1 February 2024, all eligible entries will be assessed against the judging criteria by suitably qualified assessors.

A shortlist of the best entries in line with the judging criteria will then be provided to the independent judging panel, who will make recommendations for which entries should receive funding and advance through to the finalist phase.

The Department for Science, Innovation and Technology will make the final decision based on the judges' recommendations. You can expect to hear about the status of your entry in April 2024.

Information you provide in your entry may be shared with our partners (including our judges, and due diligence providers) for the purpose of administering the Prize. For more information on how we use your data, please have a look at our <u>Privacy policy</u> and the <u>Terms</u> and conditions of the Manchester Prize.

<sup>©</sup> Crown Copyright. All content is available under the Open Government Licence v3.0, except where otherwise stated. Imagery in this document has been developed using generative Al using a reference from DSIT owned imagery.