DIATOMIC Digital Accelerator Programme

Application Guidance

July 2025

DIATOMIC DIGITAL ACCELERATOR PROGRAMME

Application Guidance

Purpose

This guide will help you prepare the best application you can for Connected Places Catapult accelerator programmes.

You should always read the other programme documentation relating to the accelerator to which you are applying. In addition to the content of this guide.

Connected Places Catapult can support you by providing objective feedback and advice on your application. Make sure you contact us in plenty of time before the deadline to maximise the support available to you.

Most of the Connected Places Catapult accelerator programmes follow a similar application format. The questions are designed to help assessors access the information they need, and they are not there to try and trip you up. It is important that you answer the questions asked and cover all aspects the guide describes. You should try to use easily accessible language: the easier you make it for the assessor to understand and check off the information they seek, the higher the proposal is likely to score.

Contents

1. Introduction

The DIATOMIC (Digital InnovAtion TransfOrMatIve Change) Digital Accelerator is a programme funded by Innovate UK and the West Midlands Combined Authority.
Led by Connected Places Catapult, in partnership with Birmingham City Council, University of Birmingham, Birmingham City University, and Aston University, the accelerator is looking for West Midlands-based innovators with a digital solution that could support the planning and optimisation of the Birmingham Knowledge Quarter (BKQ) or Wolverhampton's Green Innovation Corridor (GIC).

The accelerator programme will select at least 5 SMEs to trial their solutions and a total pot of £100k will be made available to develop and demonstrate their digital twin use case with the support of the programme partners. We expect projects to cost between £10k and £20k.

This application guide will provide supporting information to help accelerator applicants complete and submit a high-quality application.

Digital solutions will be integrated onto a central digital twin platform, building upon three existing use cases. The Siemens developed digital twin platform employs a composable architecture that breaks away from traditional layered approaches. Instead of building a monolithic system, it uses modular building blocks that function as microservices, allowing different partners to develop and contribute components independently while maintaining interoperability through standardized APIs and governance. This approach enables greater flexibility, scalability, and collaboration as each organization can focus on their specific expertise areas (initially, traffic monitoring, energy systems, or fuel cell analysis) while still integrating seamlessly into the federated ecosystem. The modular nature also facilitates easier updating, replacement, or addition of components without disrupting the entire system.

2. Eligibility

The Diatomic Digital Accelerator is open to micro, small and medium-sized enterprises in existing supply chains as well as those looking to move into new sectors.

Applicants must have the following.
- A registered United Kingdom company address.
- Registration or operational base within the West Midlands region.

- Demonstrable alignment of the proposed solution to one of the specific programme challenges.
- An innovative technology or solution at TRL 4 or above.
- Demonstrable alignment to one of the challenges being addressed by this programme.
- A willingness to travel on occasion to face-to-face meetings and events as required by the programme.
- A willingness to complete a development, testing or a demonstration of your solution in relevant environment.

Equity, Diversity & Inclusion

The Programme celebrates Equity, Diversity, and Inclusion (EDI) not just because it is the right thing to do but because it leads to better decisions, better innovation and makes our working life more rewarding and more productive. All partners are committed to fostering EDI in our workforce, our partners, suppliers, and innovators.

We hold EDI to include the characteristics outlined in the Equality Act 2010 {Age; Sex (and Gender); Race (and Ethnicity); Disability; Religion or belief; Sexual orientation; Gender reassignment; Marriage or civil partnerships; Pregnancy and maternity}, but also other historic barriers to opportunity, such as "class", nationality, dialect, education, and other forms of socio-economic exclusion.

The Programme is committed to the following EDI principles:

- Provide a level playing field for all innovators seeking to apply to participate in the Programme.
- Drive a human-centred approach when tackling real world challenges.
- Foster an open and inclusive environment for businesses joining the Programme.
- Offer advocacy and collaboration opportunities to reduce barriers to innovation.
- Encourage a range of perspective in our shortlisting and due diligence process by selecting diverse assessment panels.

3. The programme

The Accelerator programme process is a truly 'collaborative experience' where you can get the most out of working closely with key players to understand their needs and demonstrate/customise your solution accordingly.

This section outlines the challenges through this accelerator. Candidates are not limited in the number of areas they may be interested in and may choose to apply to one or more challenge areas. Where a particular solution is applicable to more than one of the challenge areas, this must be clearly communicated.   We advise that you read the challenge scoping document in more detail

It is important to note that the list of innovations provided under the thematic areas are not exhaustive and candidates are encouraged to recommend solutions relevant to the challenges.

Challenge 1: Mobility and the last mile - BKQ
Challenge 2: Land usage and underground infrastructure - BKQ
Challenge 3: Digital connectivity - BKQ
Challenge 4: Building optimization - BKQ
Challenge 5: Planning - GIC
Challenge 6: Renewable energy - GIC

4. Application Guidance

General Guidance

- Carefully read this guidance document before preparing your application.
- You can access the application form on our Community Platform. Please let us know if we can make a reasonable adjustment to enable you to apply.
- Only the information in your application form will be assessed as well as additional attachments where requested.
- Applications must be submitted by midnight on 31 August 2025. Late submissions will not be considered.
- Please keep within the maximum word counts noted in each of the sections of the application form. **Any content that exceeds the word count limit will be disregarded.**

- In addition to the information included in the application form, further guidance on what should be included in your response to the application form question is given below. You should also refer to the assessment scoring criteria section as that will help to maximise your score.
- Please ensure you have read and understood the [NDA & terms and conditions](#) , [the pilot terms and conditions](#) our [Privacy Policy](#) set out on the website under the 'How to Apply' section.

Application Questions

Section 1 & 2 – Company Information & Company Information (continued)

In section 1 &2 of the application form we are gathering general information about your business:
- Name of the company
- Company website
- UK office address
- Short company description
- Long company description
- Company house number
- Size of your company

Section 2 – Financial information

In the section 2 of the application form focuses on financial information of the companies. We are interested in understanding if your company is revenue generating and profitable. It will help us assess if your company has the capacity to deliver on the programme.

Section 3 – Diversity & Inclusion

In the section 3 of the application form, we are interested in learning your approach to EDI. EDI is extremely important to us, and we also want to discover in this section if any reasonable adjustments need to be made for your team.

Section 4 - Due Diligence

In section 4 we need to determine that applicants represent businesses that are:
- registered in the UK;
- Operational in the West Midlands and;
- active and currently trading.

As the programme offers funding, we have to run some checks to make sure companies are eligible, compliant, and set up to receive funding. We only ask for what's necessary, and we keep your data safe and confidential.

Section 5 - Investment

In the section 5 of the application form, we are interested in knowing what funding you've received to date helps us understand your stage so we can tailor support and make relevant introductions.
 If you're planning to raise investment in the next 12 months, we may be able to help through pitch opportunities, investor connections, or funding-readiness support.

Section 6 - Programme Specific Questions

Section 6 of the application form should detail how you will trial your solution and how it would help address the programme challenges. At the start of the programme, you will be required to work with related stakeholders and technical experts from Connected Places Catapult to create an operationally sound project trial proposal.

For the programme's assessment panel to accurately evaluate your application, we require the following information.
- A description of your solution – what it is, how it works and why it is needed.
- How the solution is innovative and how it is different to competitive technology.
- The traction you have already achieved in the way of sales, contracts, and collaborations.
- A high-level outline of what a future trial could look like. If successful, a detailed project proposal will need to be agreed between your company and related stakeholders.
- Information about the team that would work on the project.
- A project budget that details the direct costs associated with this work.

The guidance below will give you more details regarding specific questions within this section.

Question on Reasons behind the challenge(s) selected – This question seeks to understand the main motivation for your project, i.e., you should clearly describe the problem or challenge you are seeking to address. You must clearly articulate why you consider this to be a high priority challenge for the industry. You should not give full details of your innovation here; however, you should focus on why it is needed.

Question on Technology Readiness Level – It is helpful for us to see where your technology currently sits in its development. This will allow us to determine the level of support you may need to bring it to market and whether it is a good fit for this programme.

Question on Solution – Tell us all about your solution in this section, in layman's terms. What is it, what does it do and how does it work? You can also include:
- How your solution could contribute to improvements within the sector.
- How your solution will impact your target end users and meet the needs identified in your previous engagement activities.

Question on Innovation – For this question you need to provide a strong case for why and how your solution is innovative. For example, does your solution apply existing technologies in new areas, is it about developing new technologies for existing areas or is it a completely novel approach?

You should explain what solutions currently exist and how yours is unique, i.e., your application must provide details of its competitive advantage over any existing solutions. Your idea should be genuinely novel, and not come across as a minor change.

Make sure you explain how your solution will advance and improve the current state of play within the industry and provide evidence of how or why your innovation or solution is likely to work. You should also tell us whether you have protected your IP through patents, copyright, or trademarks.

Question on Market understanding - We would like a transparent description of any technical and commercial risks you foresee with your solution, including specific details on regulatory risks, supply chain risks, competition, and anything else you deem relevant. There Is no need to downplay or minimise the risk - we understand that a radically Innovative project carries a level of risk.

Question on Traction – In determining the validity of your solution, our assessment panel would like to see evidence of your commercial traction to date. If you can, please provide us with details of:
- Your existing customer base, including early adopters.
- Who your collaborators are, both past and present.
- Market commendation, such as grant funding paid, investment raised and/or letters of support.
- Successful proof of concepts and or trials already undertaken.

Question on Team – You should describe the roles, skills, and relevant experience of the project team, including any sub-contractors. Please do not specify your team members' names.

Section 7 - Trial Specific Questions

Question on Trial Summary - please provide a one paragraph summary explaining what you will be developing or testing and what the outcomes will be. **Please note that we may share this publicly so do not include any sensitive or confidential information.**

Question on Trial Design – It is critical for us to be able to determine from the outset how your trial might look. Please give a high-level project design detailing how you would develop and test your technology or solution in the future.

You should include:

- The proposed timeline of key milestones in development and deployment.
- How you plan to manage the project.
- The characteristics of the testing environment which you might require.
- The input that would be needed from stakeholders (for example, data, infrastructure, equipment etc).
- A list of datasets or data parameters that will be required to develop and trial your solution (Please note that the Diatomic Digital Twin platform currently supports three use cases: Air quality and traffic, Fuel cells for EV and Energy systems.)
- Any deployment support you may require from CPC, partners and third parties.
- Key risks or challenges you foresee and the plan for risk mitigation.
- What you hope to learn/demonstrate on the trial.
- Please feel free to upload any supporting documentation.

Question on Expected Impact and Evaluation – Please tell us how you would go about evaluating the impact of your technology or solution, i.e., how you plan to measure its effectiveness. The benefits of your solution could be economic, social, environmental, regional, or a combination of these factors. How will you know that your technology has been impactful, and why is this important?

Question on Technical Fit and Integration - Please also consider how open and technically ready your solution is. Is the solution containerised, or easily containerised, and does it use data and APIs which can easily be integrated onto the digital twin platform?

Question on Project Finances
You can invoice up to £20k of your direct project costs through this programme. However, the actual amount awarded might be lower. Any additional funding will need to be directly funded by the applicant. Projects should demonstrate value for money. All cost information provided should be clearly explained and all rates must reflect fair market value. Sub-contractor and material costs should be fully justified within your application. An outline of why each sub-contractor is crucial to the project's delivery would be helpful.

5. Assessment Scoring Criteria

After the competition deadline, only applications that meet the eligibility criteria and scope of the competition will be formally assessed. Connected Places Catapult reserves the right to declare applications as out of scope of the programme.

Applications that progress to the assessment stage will be reviewed by at least three expert assessors from the Connected Places Catapult and our partner organisations. Assessors with a broad technical knowledge across different areas of expertise and technology will mark your application. You should therefore write clearly in layman's terms, avoiding acronyms and obscure jargon.

This section details the five criteria our assessors will use when scoring your application. Under each criterion there is a maximum score of five available.

- Solution & Innovation (25%)
- Programme Fit (25%)
- Trial Readiness & Feasibility (20%)
- Commercial (Market & Traction) (15%)
- Team (15%)

Following the initial assessment, several applicants will be shortlisted for interview. Interviews will take place from the 23-25th September. With regret, we will be unable to accommodate individual requests for interview slots. You will be provided with Interview guidance.

Solution & Innovation

It must be clear that your solution is needed and that it has real potential to meet one or more of the project challenges. To achieve the highest score under this criterion, assessors will be looking for the following:

- **Unique Selling Points (USPs)** – USP is critically important to the customer, and well protected with IP and other defensibility resources versus existing solutions/competition.
- **Technology risk** - The solution appears fully feasible, with sound assumptions and evidence of feasibility.
- **Additional risks** – A robust mitigation plan exists for additional risks including regulatory hurdles, availability of necessary materials/supplies, adoption by end-users or anything else.

Programme Fit & Impact

In determining your suitability for funding, it is vital that you meet the programme eligibility criteria. To achieve the maximum scoring in this section, assessors will be looking for:

- **Challenges** - Very strong fit to one or more challenge statements
- **Project impact –** Proposed project will as a strong potential impact on the West Midlands
- **TRL –** TRL 4 or above
- **Location** – SME based in the West Midlands

Market & Traction

For this section assessors will be looking to see that you have a clear path to monetisation with a growing market and minimal competition. We would also like to see whether your solution has already gained interest from the market. Traction here could be in the form of actual sales, potential collaborations, interested parties, evidence of intent and investment raised. To achieve the maximum score in this section, assessors will be looking for the following:

- **Traction** – Revenue generated from key customers or contracts signed.
- **Investment Readiness –** Investment ready today, and/or substantial investment received recently.
- **Monetisation** – Monetisation model including pricing is likely to be profitable and sustainable and there is evidence of customer willingness to pay.
- **Market** - Very large or rapidly growing addressable market with little to no competition.

Trial Proposal & Feasibility

In determining your suitability for funding for the programme, it is vital that we assess whether a potential trial of your technology is operationally viable. To achieve the maximum score for this section, assessors will be looking for the following.

- **Credible approach** - A highly credible approach to the design and delivery of their trial has been provided by the applicant
- **Risk & Mitigation** - An acknowledgement of key external trial constraints (operations, infrastructure, certification etc.) has been provided by the applicant
- **Project Feasibility –** Proposed project is likely to be very successful
- **Data –** Your project utilise datasets that are structured into metadata, geospatial and/or timeseries data. g) and are in the following formats: CSV, XLS or JSON.

Team

You should describe the roles, skills, and relevant experience of the project team, including any sub-contractors and how your expertise will be used to develop the trial solution. To achieve the maximum score for this section, assessors will be looking for the following:

- **Skills** - Outstanding team with a great level of multidisciplinary (technical, business, sales, etc.) experience to execute.
- **Experience** - More than one key member with extensive sector knowledge and previous entrepreneurial success (e.g., founders with 10 + years industry experience, successful exits, and unique skill sets).
- **Communication** – Communication shows strong charisma and is very clear, showing potential to bring stakeholders on board effectively.

Notification of Assessment Outcome

Only applicants that progress to the assessment stage will be given a breakdown of the scores achieved for each section of the application form. Connected Places Catapult reserves the right to declare applications unsuccessful and out of scope. Once the selection decisions have been made, we regret that we are unable to offer follow up meetings or further feedback for unsuccessful applicants.

- If you are successful, you will be sent a New Supplier Form, Terms and Conditions Agreement, Invoice, and Statement of Expenditure form that you must sign and return, along with any additional documentation that is requested within stated timelines

Please note that if you are the lead applicant in a consortium, you will need to inform the other collaborators and partners about any selection decisions.

There will be an [Application Support Webinar](#) on 29th July where we will provide more details about the scope of the programme, the challenges and the application process.

6.   Project Reporting

Trial Plan

Early in the programme, you will be expected to produce a trial plan that details your plan for developing and or testing your technology or solution. The proposal should be written and presented to a professional standard and suitable for non-specialists, with all acronyms and unavoidable technical language clearly explained.

Progress and Final Reporting

Throughout the programme you will be required to provide regular progress reports highlighting opportunities, issues, and risks. At the end of your project delivery period, you will be expected to provide a final report detailing your outcomes, impact, and futures exploitation plans. There will also be a survey for you to complete which ask about your experience of participating in the programme.

Financial Reporting

Please keep evidence of project costs.

Your invoices will need to be accompanied by a Statement of Expenditure, which should include a clear breakdown of all costs incurred.

7.   Payment Schedule

If you are selected to receive funding, the following will apply.

- CPC will be procuring the services for the programme under a pre-commercial Pilot & Trial contract.
- Once the contract has been signed, the Catapult will provide you with a Purchase Order number which must be clearly noted on all invoices.
- If you are VAT registered, please include the appropriate VAT on the face of the invoice.
- To enable your fees to be paid, you will need to raise an invoice and send this to us.
- This funding will not constitute a grant and therefore will not be subject to Minimal Financial Assistance (MFA)

Payments are staged. An up-front payment of 60**%** will be made to enable the start of the project in October 2025. At the end of the project in March 2026, the remaining 40**%** will be paid once your end of project report has been approved. Invoices will have to be provided for the payment to be released.

Only fees incurred between project start and end dates will be paid.

8. Dates and Deadlines

Please note the dates and deadlines for the competition below. These are indicative timings; we will adhere to this schedule as best as possible. The closing date for applications is fixed and will be midnight on **31st August.**

Applications submitted after the deadline will not be considered. Extensions will not be granted under any circumstances.

Applications open	17th July
Application Support Webinar	29th July
Application deadline	31st August
Notification to shortlisted applicants	16th September
Interviews	22-24th September
Contracts issued	30th September
Acceptance of funding (returned signed contract)	6th October
Welcome Day	8th October

9. Contact Details

If you have any questions about the programme, please get in touch with our team via email – Agathe Parois, Programme Manager, agathe.parois@cp.catapult.org.uk

We wish you luck with your application!

10. Application FAQs

Can companies submit more than one application?
Yes, you are allowed to submit more than one application for this programme.

Who will be reviewing the applications?

We will have experts from University of Birmingham, Birmingham City University, Aston University, Birmingham City Council, University of Wolverhampton, Wolverhampton City Council and Connected Places Catapult reviewing the applications against the application criteria.

Can we provide videos or diagrams in the application?

Yes, you can add diagrams and links to videos, if you are having issues, please let us know.

What TRL level does the solution need to be at in order to be eligible for this programme?

The TRL level your solution needs to be at by the start of the programme is 4. Your solution does not need to be at this level for you to apply. If your product/service is at a lower TRL, we would expect that you explain in your application how you will develop the solution in the coming months to get it to the required level by the programme start date.

Who are the partners for the programme?

The partners for the programme are: University of Birmingham, Birmingham City University, Aston University, Birmingham City Council, University of Wolverhampton and Wolverhampton City Council.

Who selects the project partner?

You are welcome to specify with which partner you would like to work with as part of the programme but we cannot guarantee that you will be partnered with them if selected. We will do a match-making exercise between SMEs and partners before the beginning of the programme.

Can you liaise with a partner before applying?

Yes, you are welcome to liaise with a partner during the application process and we understand that some SMEs may have already worked with the partners before. We follow a structured and fair application process which eliminates any bias and ensures that it is a fair process selecting SMEs for the programme.

If you feel the applicant has applied to the wrong challenge area would you redirect them to a more appropriate challenge area or reject their application?

Yes, we will reassign to the correct challenge area if we feel that the applicant has chosen the wrong challenge.

Can I use a Sub-Contractor to deliver elements of the project?

Sub-contractors can be used for delivering elements of the project. It is your responsibility to set up the required subcontract agreements, pay the sub-contractor, and ensure that they are delivering on time and on budget. Your Trial Proposal Plan must explain the specific value that

your chosen subcontractor will bring to the trial. If you wish to use a sub-contractor to conduct work for your trial, the max % of funds you can give out to a sub-contractor is 30% of the total grant amount. The sub-contractor can be based in the UK or internationally. An SME in the competition cohort can be used as a sub-contractor.

Can I join the programme in collaboration with other companies?
Innovators should submit the proposal that they think would give them the best chance of being selected. You can partner with other SMEs to submit a joint proposal, but we will ask for a lead contact. If you submit a joint proposal, the funds will be split between the SMEs. Please be clear in your proposal on how the funding will be divided.

If we applied to other programmes but weren't selected, should we answer "yes" or "no" to whether we've participated in a Connected Places Catapult-run programme in the past three years?
You should answer "no" if you have not been accepted onto a programme. We would like to know if you are part of any other Connected Places Catapult activities such as Innovation Clusters.

Can we apply if we are a remote company? Can we apply if we are a non-UK entity intending to move to the West Midlands?
For this programme, the applicants need to either be based / have a registered office in the West Midlands or have strong evidence of operations in the West Midlands.

Can we get the contact details of the challenge owners?
We are committed to facilitating as much clarity as possible throughout the application and trial process, so if you have any queries regarding the suitability of your proposal or would benefit from a focused introduction to a challenge owner, please reach out and we will endeavour to support you. Once selected for the programme, successful applicants will receive further guidance on key considerations for running trials, including areas such as intellectual property rights, data protection, funding deliverables, risk management, and compliance.

We recommend that you reach out directly to Agathe Parois (agathe.parois@cp.catapult.org.uk). She will be able to direct your questions to the relevant stakeholders.

Where can I find the scoring criteria?
You can find the scoring criteria in the section 5 of this document.

Can I apply as a university/academia?
To apply, you must be a registered business. Spin-outs and private businesses collaborating with universities are eligible but must disclose their affiliation in the application.

Programme FAQs – For those who are successful in being selected for the programme

This document outlines areas that the Catapult believes that our accelerator participants need to consider during their time on the accelerator programme when running trials. This list is by no means comprehensive and is for information only. Your Programme manager will be available to discuss any feedback or questions. Please note this advisory document does not form and should not be interpreted as forming any formal contract or advice between the Catapult and you.

Is the intellectual property (IP) of my solution protected in the agreements I have signed for the programme?

It is important that you think about your IP (software, algorithms, etc.) when you share information with the programme partners. We recommend that you review [clause 8 in the Trial T&Cs / clause 9 in the Pilot T&Cs] before committing to the programme so you are clear on who owns what up front, especially if the programme partner contributes to any modifications or enhancements if you run a trial. The Catapult does not have agreements in place with programme partners to protect your IP. Care and consideration should be taken when discussing your intellectual property with all non-Catapult staff.

What protections are in place when it comes to privacy and the protection of data, including confidential or sensitive information during the programme?

If data is being shared during the programme, clear data handling and privacy policies should be in place, between you and the programme partner. It is likely that the client will already have their own processes for this which you can follow. Key things to consider could include GDPR, how you will collect and process the data as well as data storage. The Catapult does not have agreements in place with programme partners to protect your data.

What am I expected to deliver in order to receive the full funding?

Your offer letter outlines what you will need to deliver to receive the funding. Please also be aware that you will only be re-imbursed for the agreed funding amount in line with your contract. If there is any overspend this will need to be covered by your company. Please review clause 11 'Withholding, suspending and repayment of grant' in the grant T&Cs document.

How is the payment of the funding made? When? Does it go in its entirety to the SME?

SMEs realising a trial as part of the programme will receive up to £20k of funding. The SME will receive the entirety of the funding. The funding will be done via a pre-commercial contract between Connected Places Catapult and the SME. You will receive 60% at the beginning of the programme and 40% at the end of the programme. More details can be found in Section 7 of this document.

Trial specific FAQs

What liabilities need to be insured or mitigated for the trial to take place?

Every trial is different with its own risk profile. It is the responsibility of the innovator and trial partner to understand these risks and then agree how each of these risks is mitigated or eliminated. Example risks could include systems failures, data breaches or other unforeseen issues. We recommend that you discuss this with your partner to agree on how this will be set out before the trial takes place. [Clause 14 & 16 in the Trial T&Cs / clause 5 in the Pilot T&Cs] covers this in more detail where it will specify specifics of insurance which needs to be in place before the trial starts.

What insurance needs to be in place for the trial to run?

It is the responsibility of the innovator to effect and maintain a policy or policies in respect of all risks which may be incurred during the trial. [Clase 16 'Insurance' from the Grant T&Cs explains the public liability and employers liability insurance requirements that you will need to meet in further detail / clause 5.10 in the Pilot T&Cs explains insurance in more detail].

What regulatory compliance do I need to comply with for the trial?

If your technology solution operates in a regulated space (e.g. finance, health etc.) it is your responsibility to ensure that you comply with industry specific regulations. Your trial partner should be able to support you on understanding what you need to comply with.

What if I need to change my trial plan halfway through the trial stage?

If your proposed trial plan needs to change during the trial period, you will need to go through a change process to get the amendments approved before it can be confirmed that you will still be eligible to receive the remaining funds at the end of the trial for the new work proposed. This process will be explained to you via your Catapult contact.

Can you please share the login link for Diatomic platform to use?

The DIATOMIC Platform is presently accessible to current program partners. Plans are in place to broaden access as part of this program. SMEs that participate will be able to use the platform.