

Industrial 5G Testbeds and Trials: Manufacturing and Logistics Application Form

1. Guidance

This application form should be completed in accordance with the guidance provided in the Industrial 5G Testbeds and Trials Competition Guidance document and supporting material.

Once completed, this document should be submitted in Microsoft Word format (contact [industrial5gtt@culture.gov.uk](mailto:industrial5gtt@culture.gov.uk) if this format will cause difficulties).

**Project leads should submit the following documents:**

1. This Project Application form (plus any allowed appendices)
2. Project Finance Form (one per project partner), signed
3. Finance Summary Form (one per manufacturing project)
4. Project participant form (one per project partner)
5. PDF copy of latest accounts for each partner
6. Application Form

**A Application Information (not scored)**

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| **Project Name** |  |
| **Programme Lead Organisation** |  |
| **Programme Lead Contact Name** |  |
| **Programme Lead Contact Email** |  |
| **Start Date** |  |
| **End Date** |  |

**B Project summary (not scored)**

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| **Provide a short summary of the content and SMART (specific, measurable, achievable, realistic, timed) objectives of your project, including what delivery of this project will contribute to the 5G Testbeds and Trials Programme.**  **It provides an introduction to your proposal for the benefit of DCMS staff, government staff and assessors only. It will not be made visible to the public. It should cover, in brief:**   * The vision of what will be delivered at the end of the project, including the business need or market opportunity to be targeted. * The approach to be taken and how this will ensure an on time, cost and quality delivery. * The difference the project will make to the competitiveness and productivity of the partners involved.   **400 words limit** |
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**C Public description (not scored)**

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| **Describe your project in detail, and in a way that you are happy to see published. Please do not include any commercially sensitive information. We will publish this description. This could happen before you start your project.**  **Please also check the box below to confirm DCMS may publish a list of your proposed project partners with the description.**  **400 words limit** | |
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| **DCMS may publish project partner list** |  |

**D Scope (not scored)**

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| **Check the appropriate box to identify if your application is to the Manufacturing or Logistics Industrial 5G Testbeds and Trials competition.**  **Describe how your project fits the scope of the competition. If your project is not in scope it will not be eligible for funding.**  **400 word limit** | |
| **This application is to the Manufacturing competition** |  |
| **This application is to the Logistics competition** |  |
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**E Section 1: The business case (50%)**

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| **Question 1: What industry challenges and use cases do you plan to address and what are the benefits of doing so? (12.5%)**  * Describe the main motivation for the project, the industry challenges and the use cases that grant funded trials and any other planned trials with funding from other sources will address. Your description must identify genuine commercial drivers for success and sustainability, and the particular challenges that could be met using 5G capabilities, and highlight innovative aspects. * How close to market are the applications or services supporting the use cases that you will be addressing, and how are they differentiated from those currently available with respect to the state-of-the-art? * Describe how will this project affect your longer term roadmap for new products and services * Describe potential additional use cases that the testbed could cover and the wider economic, social, environmental, cultural or political challenges which are influential in creating the opportunity, such as incoming regulations, using the Horizons tool if appropriate. * Describe how you will evidence the impact of your testbeds and trials   **800 word limit** |
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| **Question 2: What is your proposed project and its key outputs, trials and demonstrations? (12.5%)**  * Describe the testbed facilities you intend to deliver, or exploit, as part of the project, both in terms of the products or services available for 5G trials and, if any, other non-5G trials. Your description must identify the location, or locations, at which the testbed will be deployed and their role in the testbed. * Describe the key outputs of your project you will deliver in the first year and in the following period and how these will deliver against the challenges and use cases you have identified * For manufacturing proposals, you should clearly identify what will be delivered before the Project Development Review * Describe the system architecture and major components of the testbed, in particular the 5G, and non-5G, technologies that will be supported. Your description must explain how coverage (radio frequency, service continuity and access) will be ensured. * Describe how you will ensure your implemented solutions are safe and secure with respect to the requirements of industrial (real-time) applications. * Describe how the testbed will build on any existing infrastructure, such as industrial automation legacy, existing management platforms, or centres of excellence, and what benefits this will offer. * Describe how the testbed and associated facilities will be provided for trial organisations and developers. * Describe how you intend to factor in the expected availability of the 5G services and devices featured in your proposals.   **800 word limit**  You can submit a single appendix as a PDF and up to 2 pages long to support your answer. |
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| **Question 3: How will the testbed and trials contribute to society and/or the local economy? (7.5%)** Describe how the project will deliver and measure benefits, such as:   * Developing and exploring new business models and applications, and potential benefits to businesses, including productivity improvements. * Supporting the development of the local economy, including the growth of local businesses, particularly SMEs. * Benefits to society and consumers such as health, environmental, public safety etc. * Collaborating with DCMS to identify technical and commercial barriers to 5G deployment. * Achieving meaningful impacts on security, health and safety, and the efficiency of industrial processes. * Helping to establish your location as an attractive place for additional companies to invest in areas relevant to your vision. * Enabling improvements in local infrastructure. This could include, for example, synergies with other local projects including any potential projects under the DCMS Local Full Fibre Networks Programme, and other activities aimed at improving local connectivity. * Explain how this project fits with your current products, service lines or offerings   **600 word limit** |
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| **Question 4: How will the testbed and trials support the development of a 5G ecosystem in the UK and 5G adoption into the sector? (7.5%)**  * Describe how the project will contribute to developing the UK’s capabilities in the emerging 5G environment, and particularly in the space where the telecoms industry meets industry sectors which are relevant to your proposal. This should demonstrate a good understanding of relevant industry sector requirements. * Describe how you will ensure a strong link between the proposed project, wider programme participants. * Describe your approach to the identification and dissemination of lessons learned and project outcomes * Describe your plans for collaborative activities with other Industrial 5G projects, supported by the Industrial 5G coordination support function provided by Digital Catapult, to the value of 2-4% of DCMS grant funding. * Describe how and what the trials will contribute to best practice in the relevant industry sectors. * Describe your plans to contribute to consensus building around industrial 5G and how you plan to collaborate to bring the concept to maturity.   **600 word limit** |
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| **Question 5: What is the plan for the project to deliver a commercially sustainable output? (10%)**  * Describe how the project outputs will deliver value beyond the funding period, including how it they could be further developed, scaled or improved beyond the timeframe or outside of the scope of this project. Detail any follow-on projects or future improvement opportunities currently envisaged. * Describe your approach to maintaining the availability of the testbed after the grant funding period. This could include:   + Plans for attracting other trials from initial trial organisations involved in the project or additional trial organisations. This may include 5G and non-5G trials.   + Potential opportunities for and sources of additional funding outside of those identified in this proposal, over and above any future opportunities for funding from this DCMS programme.   + How your testbed will be developed on an appropriate open access basis. If it is not appropriate for it to be open, please explain why. * Describe the project partners’ approach to securing follow-on funding or activities for trials to lead towards commercial success.   **700 word limit** |
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**F Section 2: Project delivery (32.5%)**

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| **Question 6: What is your project plan, including key activities, milestones and deliverables? (12.5%)**  * Describe the project outputs and how you will deliver these to address the challenges, use cases and opportunities described in the Business Case section of the competition brief. * Provide a project plan that identifies the main work packages including resource, capital and management requirements. These should be clearly linked to the costs detailed in question 9. For each work package describe the purpose, objectives, methodology, deliverables, milestones and resources (effort, equipment, facilities and services) involved, including for proposed collaborative and/or dissemination activities.   **800 word limit**  You can submit a single appendix as a PDF up to 2 pages long to support your answer. |
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| **Question 7: What is your project governance structure and approach? How will key decisions be made? (10%)**  * Describe your proposed project management processes and governance structures. * Describe the roles and responsibilities, skills and experience of all partners that are relevant to the approach you will be taking. In particular, identify the participant(s) who will be responsible for the management and operation of the testbed, and why they have the right skills and capabilities to deliver this. * Describe how your consortium will deliver this project. How will the organisations achieve more working together than if they were working individually? * Explain why the project lead is best placed to undertake this role. Business led projects are preferred unless there is a strong justification otherwise. * Describe which legal entities will own any assets which are paid for by grant funding. * Describe the details of any vital external parties, including sub-contractors, who you will need to work with to successfully carry out the project.   **700 word limit**  You must submit a work breakdown structure (including cost of each work package) as a single PDF appendix and up to 5 pages long to support your answer. It must be legible at 100% zoom. |
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| **Question 8: What are the risks to project success? What is the project’s risk management strategy? (10%)**  * Identify the main risks and uncertainties of the project and provide a risk analysis for the project content and approach, with a ranking of the risks and mitigations. Include any cost, timing, technical, commercial, managerial and environmental risks as well as other uncertainties (for example ethical issues, device/service availability issues) associated with the project. * Describe the track record of relevant project partners in undertaking and exploiting the results of similar projects. Highlight your ability to deliver the proposal on time, to cost and at a sufficient level of quality. * Identify any internal and external dependencies, support or engagement that is required. Indicate what is agreed at the time of submission, and what is still to be agreed, for example any legal agreements or consents that need to be put in place to enable the works to be undertaken (including land agreements, planning and highway consents, construction contracts, subcontracts, utility agreements, wayleaves, and authorisation to access required radio frequency spectrum).   **700 word limit**  You can submit a single appendix as a PDF no larger than 1MB and up to 2 pages long to support your answer. |
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**G Section 3: Funding and added value (17.5%)**

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| **Question 9: How does the project ensure that Value for Money is achieved and how have you ensured that the financial proposal for the project is robust? (10%)**  * Detail the estimated project cost for each work package. Make clear the level of contribution from each project participant and the level of grant funding requested from DCMS. A summary of this information should be provided in the financial summary table in the application form. * A narrative description summarising what each project participant will be delivering and the costs associated. * Describe the contributions in kind from each project participant. * Set out how you will ensure value for money through your sourcing approach and supply chain. * Identify the amount of DCMS grant and other funding you will set aside for working with other participants in the 5G Testbeds and Trials Programme, the 5G Sector Testbeds & Trials Working Groups and with the UK5G. A minimum of 2-4% of grant funding is required. * Provide a cost breakdown of forecast expenditure on the project. Identify costs for the testbed and funded trials separately. Explain how the costs have been calculated. * Detail the spend profile by month, linking it to milestones and deliverables as needed. This should be fully consistent with the dates you have specified in the project plan. * Describe what network and any other infrastructure will be used in the project (if any), and how it will be sourced. * Describe any sub-contractor costs and why they are critical to the project and are not grant receiving consortium members. * Confirm that the grant amount requested includes any irrecoverable VAT, all fees and charges, and appropriate allowance has been made for any price inflation during the project period. * Confirm that all grant funding claims do not extend beyond 31 March 2022.   Assessors need to be confident the project can be delivered to the stated cost. They will consider:   * The response to this question and the supporting financial information provided. * The suitability of the proposed costs - costs considered excessive will be a cause for serious concerns. * The total amount of grant funding requested from DCMS. * Whether there is an appropriate level of contributions from public sector organisations who are key project partners. * Whether there is a significant contribution from any public sector organisation who is the lead project partner.   **1000 word limit** |
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| **Question 10: How does financial support from DCMS and financial contributors add value? (7.5%)**  * Detail how the funding you require will allow you to undertake the project in terms of time to market and any other relevant factors, where you would otherwise be unable to. * Tell us whether the project could go ahead in any form without government funding, and if so, what difference would government funding make? Explain why this contribution would be beneficial to the project partners involved in the project, as well as the UK taxpayer (in terms of economic, social, environmental and other impacts) and how will you monitor the impact (baselining, monitoring and regular reporting of outcomes to DCMS will be a deliverable for this project). * Describe any direct follow-on funding from project partners. This should include any post-project research and development, further trialling and capital spending commitments by the project partners. * Describe any additional areas of added value not set out elsewhere in your proposal.   **600 word limit** |
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**H Other funding from public sector bodies**

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| **If you are receiving funding for this project from other public sector sources (column 7 of the Finance summary), please provide:**   * The names of the bodies * The name of the programme or scheme from which the funds are provided * The fund amounts |
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**I Finance Summary**

Please complete the following finance summary.

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|  | 1. Organisation name | | 2. Company registration number | 3. Enterprise category | | 4. Postcode where majority of work will be done | 5. Contribution to project by each organisation  (£) | | 6. Funding sought from DCMS  (£) | 7. Other funding from public sector bodies  (£) | | 8. Total  (£) |
| Lead org. |  | |  |  | |  |  | |  |  | |  |
| Partner 1 |  | |  |  | |  |  | |  |  | |  |
| Partner 2 |  | |  |  | |  |  | |  |  | |  |
| Partner 3 |  | |  |  | |  |  | |  |  | |  |
| Partner 4 |  | |  |  | |  |  | |  |  | |  |
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| Partner 6 |  | |  |  | |  |  | |  |  | |  |
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| Partner 8 |  | |  |  | |  |  | |  |  | |  |
| Partner 9 |  | |  |  | |  |  | |  |  | |  |
| Partner 10 |  | |  |  | |  |  | |  |  | |  |
| Partner 11 |  | |  |  | |  |  | |  |  | |  |
| Partner 12 |  | |  |  | |  |  | |  |  | |  |
| Partner 13 |  | |  |  | |  |  | |  |  | |  |
| Partner 14 |  | |  |  | |  |  | |  |  | |  |
| Partner 15 |  | |  |  | |  |  | |  |  | |  |
| Partner 16 |  | |  |  | |  |  | |  |  | |  |
| Partner 17 |  | |  |  | |  |  | |  |  | |  |
| Partner 18 |  | |  |  | |  |  | |  |  | |  |
| Partner 19 |  | |  |  | |  |  | |  |  | |  |
| Partner 20 |  | |  |  | |  |  | |  |  | |  |
| **Total (£)** | |  | | |  | | |  | | |  | |

This should be completed for the full 2.5 years for both Manufacturing and Logistics proposals. Funding allocated for additional partners brought on board via the open call should be listed as a single entry labeled “Future Partners” at a 50% contribution, with unknown information left blank.

**J Appendices to complete**

Project Finance Form (each applicant)

Finance Summary Form (Manufacturing only)