

Call Guidance

Harwell and Sci-Tech Daresbury Campus Cross-Cluster Proof of Concept Grant and Highlight Call in Quantum Computing

Key Information

- Funder: Science and Technology Facilities Council¹ (STFC) and the National Quantum Computing Centre² (NQCC)
- Funding type: Grant
- Opening date: Monday 11th October 2021
- Closing date: Wednesday 17th November 2021, 17.30.

Description of the funding opportunity

The aim of this call is to stimulate industry engagement and collaboration with organisations associated with the five campus clusters at Harwell and Sci-Tech Daresbury.

The call invites proof of concept projects from any area related to the clusters in Space, EnergyTec, HealthTec, NW HealthTec and Digital. Your project must be business-led and involve one or more project partner from a campus cluster. We are keen to support multi-disciplinary projects, although it is not a requirement of funding.

This call also invites applications to a special highlight in quantum computing.

The National Quantum Computing Centre has provided funding for this highlight. It aims to stimulate industry engagement, and interactions with the NQCC and five campus clusters, focussed on quantum computing. Your project must be business-led. Companies that are not currently associated with one of the established clusters at Harwell and Sci-Tech Daresbury can apply to this highlight call, with prior permission from NQCC (further details on this highlight are at Annex 1).

What we're looking for

The main funding opportunity aims to support business-led proof of concept projects that:

- Stimulate engagement and collaboration between businesses, research centres, facilities and other organisations across the five at Harwell and Sci-Tech Daresbury Campuses
- Facilitate industry access to the excellent people, national facilities and diverse capabilities at Harwell and Sci-Tech Daresbury
- Enable knowledge exchange between industry, academic and other organisations within clusters

¹ Science and Technology Facilities Council (STFC) is part of UK Research and Innovation

² The National Quantum Computing Centre (NQCC) is funded through the Engineering and Physical Sciences Research Council (EPSRC) and the Science and Technology Facilities Council (STFC)

- Boost knowledge and technology spill overs from publicly funded organisations at Sci-Tech Daresbury and Harwell to innovative companies across in the UK
- Support business-led collaborative projects that develop, test or demonstrate the feasibility of concepts, technologies or services
- Develop new ideas on the innovative use of technologies, applications and processes
- Demonstrate the feasibility of new technologies or capabilities, or a new application of existing technology
- Use the facilities and capabilities at Harwell and Sci-Tech Daresbury Campuses for developing and validating technologies and services
- Help businesses across the UK to progress new or novel ideas and grow
- Support the UK economic recovery, in particular helping high-potential businesses to grow.

The highlight call in quantum computing aims to support business-led feasibility studies that map onto one or more of the following topics:

- Accelerate the scaling and/or integration of technologies
- Identify and explore the development of particular end use cases for quantum computing, leading towards the development of applications
- Offer a route towards the scalability or increased maturity of existing technologies
- Validate key concepts or technologies at the system, sub-systems or component level.

Scope

For the main call, your project can focus on any area related to the clusters in Space, EnergyTec, HealthTec, NW HealthTec and Digital.

For the highlight in quantum computing, your project can focus on:

- Hardware development
- Software and algorithm development
- Standards
- Validation or benchmarking
- Simulation or emulation of quantum computing
- Underpinning technologies in the supply chain, such as control systems and theory, materials for quantum computing platforms and component-level device development are also encouraged.

For further details on the quantum computing highlight, see Annex 1.

Funding

A grant of up to £30k will be awarded per successful proposal. The grant must be match funded by the lead organisation and project team (cash / in-kind).

Costs are only eligible if they are incurred and paid between the project start and end dates. Claims may be subject to an independent audit. For further information see Annex 2.

The Lead Organisation must have sufficient working capital to carry out the project, as funding is claimed in arrears upon receipt of a completed and approved Final Report.

Applicants are permitted to request small items of equipment, providing they are essential to support the delivery of the project.

All project work must complete by 29 March 2022. You must submit your final claim for funding with your Final Report by 29 March 2022.

Subsidy Control

The award will be provided in accordance with the UK-EU Trade Cooperation Agreement.

Further information about the Subsidy Control can be found at Annex 3.

You should read the Guidance on the UK's international subsidy control commitments <https://www.gov.uk/government/publications/complying-with-the-uks-international-obligations-on-subsidy-control-guidance-for-public-authorities/technical-guidance-on-the-uks-international-subsidy-control-commitments>.

It is your responsibility to seek independent legal advice before completing the Subsidy Control Declaration Form.

You must submit a completed Subsidy Control Declaration Form with your application documents to declare your eligibility for this grant.

Projects we will not fund

We are not funding projects that:

- Do not meet the competition eligibility or scope
- Do not provide match funding (cash or in-kind).

Resubmission and previous applications

You can use a previously submitted application to apply for this competition. However, you must demonstrate that you have taken into consideration any panel feedback and any new criteria.

Who can apply

Both competitions are open to collaborations only.

The eligibility criteria for the main competition and highlight in quantum computing are different.

To be eligible for grant funding in the main competition your collaboration:

- must be led by a UK registered business
- must have a Lead Organisation or Project Partner with a presence at Harwell or Sci-Tech Daresbury Campuses
- must have a Lead Organisation or one or more Project Partner that is associated with one of the Clusters (Space, Energytec, Healthtec, NW Healthtec or Digital).

To be eligible for grant funding in the highlight on quantum computing your collaboration:

- must be led by a UK registered business
- must obtain a letter of support from the NQCC prior to submission
- may have a Lead Organisation or Project Partner that is associated with one of the campus clusters (Space, Energytec, Healthtec, NW Healthtec or Digital)

Or

- may have a Lead Organisation or Project Partner from outside the established campus clusters, if one or more of those organisations wish to engage directly with the NQCC.

Lead Organisation

The Lead Organisation of a project must be a registered UK business of any size.

The Lead Organisation must carry out its project work in the UK.

The Lead Organisation may submit more than one application.

Project Team

To collaborate with the lead, your organisation must be one of the following UK registered:

- business of any size
- higher education institutions
- research council institutes
- charities
- research organisations
- public sector research establishments
- non-profit research and technology organisations (RTOs), including catapults.

All partners can collaborate on any number of applications.

All project partner(s) must contribute to writing the project proposal.

Your project can include partners that do not receive any of this competition's funding.

How to apply

To request a copy of the application form and supporting documentation, please contact CrossClusterPOC@stfc.ac.uk.

You are encouraged to discuss your project with a Cluster Development Manager, Call Manager, STFC Business Development Manager or NQCC member of staff prior to submitting your proposal (contact details at Annex 4). Please note, Cluster Development Managers will not assess proposals or participate in the review panel.

Your project must be a collaboration. All partners involved in the collaboration must contribute to writing the proposal. The roles, skills and experience each partner contributes to the project should be clear from your application.

You must discuss and agree all responsibilities, roles and rights of collaborating parties in advance of submitting your application.

You must include a detailed spending plan as part of your application, which outlines which project costs will be claimed from STFC and what will be paid for using match funding (cash or in-kind).

Application documents must be completed in full and submitted along with any supporting documentation to CrossClusterPOC@stfc.ac.uk by 17th November 2021

Letters of support can be included from other relevant parties not directly involved in the project but who support the objectives, for example, potential end users.

To be considered for assessment you must submit:

- **A completed Application form**, including background, project aims and objectives and a detailed financial plan
- **A completed Project Team form**, outlining details of the Lead Organisation and Project Partners (names, registered organisation name, addresses, company numbers)
- **A completed Subsidy Control Declaration form** (not scored by the panel)
- **Letterhead of Lead Organisation**, outlining registered organisation name, addresses, company numbers (not scored by the panel)
- **Letter of Support from NQCC**, if appropriate.

How we will assess your application

All eligible proposals will undergo peer review by an independent panel of experts, which includes specific subject matter experts.

Each proposal will be assessed on the following criteria:

- The quality of the proposal (in relation to originality and excellence in the field) and the timeliness of the proposed innovation
- The proposed approach to delivering the outputs and outcomes expected from the project and the nature of these (e.g., in relation to new knowledge, technologies, products or services)

- The appropriateness of the project team (in terms of roles, skills and experience relevant to the approach) and the strength of the collaboration between the Project Partners
- The anticipated outcomes, impact and benefits of the project outside the project team (in terms of expected impact on the economy and society at the local and national level, contribution to economic recovery from COVID-19)
- The approach to drive delivery of the impacts and benefits that will be realised beyond the lifetime of this project (in relation to progressing innovations along the TRLs)
- Whether resources, equipment and facilities needed for the project are appropriate and how the team will access / deploy them
- The extent to which the approach to project management and risk management is suitable
- The overall value for money for the taxpayer.

What happens if you are successful

All successful applicants will be notified by Monday 20th December 2021.

The Lead Organisation will receive an offer letter from STFC, which must be signed and returned within 30 days to secure the grant. Additional documentation, including a declaration that your organisation or any organisations linked to it have received a total subsidy of less than the subsidy threshold of 325,000 Special Drawing Rights in the current and previous 2-year fiscal period, must also be returned within stated timelines.

Your project must not start until you have receipt of a signed and approved offer letter.

A member of the STFC Cluster and Campus Development Team or the National Quantum Computing Centre will work with you throughout the project. This will involve up to three meetings between the project and STFC or NQCC during delivery: a preliminary Kick-Off meeting within the first weeks of the project commencing, an interim meeting mid-way through the project, and a final review in the last few weeks of the project. STFC and NQCC are not responsible for project management.

You must submit a Final Report to STFC (CrossClusterPOC@stfc.ac.uk) by 29 March 2022 to claim your funding. Further details will be discussed at the Kick-Off meeting.

After conclusion of your project, STFC and NQCC may continue to engage with successful applicants to highlight the outcomes of their project, achievements of their organisation and to demonstrate the impact of Proof of Concept programme. This may involve requests to participate in a webinar, asking for quotes or input on case studies. No material will be disseminated outside of STFC and NQCC without prior approval from the project partners.

As STFC is part of UKRI, UKRI may be required to report on the performance and impact of the Proof of Concept Programme and individual investments within the portfolio to UK Government.

Key Information

- **Funder:** Science and Technology Facilities Council (STFC) and the National Quantum Computing Centre (NQCC)
- **Funding type:** Grant
- **Maximum grant award:** £30,000
- **Opening date:** Monday 11th October 2021
- **Closing date:** Wednesday 17th November 2021, 17.30.

Checklist for documents to be submitted with application:

- A completed Application form, including background, project aims and objectives and a detailed financial plan
- A completed Project Partners details form, outlining details of the Lead Organisation and Project Partners (names, registered organisation name, addresses, and company numbers)
- A completed Subsidy Control Declaration form (not scored by the panel)
- Letterhead of Lead Organisation, outlining registered organisation name, addresses, company numbers (not scored by the panel)
- Letter of Support from NQCC, as appropriate.

Annex 1

Highlight on Quantum Computing

The NQCC is providing of funding for this call. It aims to stimulate industry engagement, and interactions with the existing industry clusters, related to quantum computing.

The highlight welcomes applications for feasibility studies related to quantum computing that map on to one or more of the broad topics below:

- accelerate the scaling and/or integration of technologies
- identify and explore the development of particular end use cases for quantum computing, leading towards the development of applications
- offer a route towards the scalability or increased maturity of existing technologies
- validate key concepts or technologies at the system, sub-systems or component level.

Particular areas of study may include, but not be limited to:

- Hardware development
- Software and algorithm development
- Standards
- Validation or benchmarking
- Simulation or emulation of quantum computing.
- Underpinning technologies in the supply chain, such as control systems and theory, materials for quantum computing platforms and component-level device development are also encouraged.

The NQCC encourages applications for feasibility studies that offer the prospect of being scaled into larger projects further downstream. Projects may include the demonstration of concepts that inform the development of a longer-term roadmap towards scalable quantum computing technologies.

For this highlight call on quantum computing, companies from outside the established clusters at Harwell and Sci-Tech Daresbury may apply, particularly those that wish to engage directly with the NQCC.

All proposals to this highlight call must obtain a letter of support from the NQCC prior to submission.

For specific queries relating to this highlight, please contact nqccinfo@nqcc.ac.uk or CrossClusterPOC@stfc.ac.uk.

Annex 2

Costing

Expenditure should be directly incurred for your project and only that project and supported by an auditable record. Costs are only eligible if they are incurred and paid between the project start and end dates. Claims may be subject to an independent audit.

Staff

- The payroll costs of all staff, full or part-time, who work on the project, and whose time can be supported by a full audit trail may be included. The need for such staff should be justified in the justification of resources attachment.

Travel and subsistence

- Travel costs for journeys that are an essential part of the project and are directly related to the research project can be claimed as a direct cost.

Equipment

- Applicants are permitted to request small items of equipment, providing they are essential to support the delivery of the project.

Other eligible costs, for example:

- Consumables
- Specialist publications or publication costs such as technical reports
- Field work / fees
- Access costs for research infrastructures
- Consultancy fees

The following costs are not eligible on your grant

- Patent costs, and other IPR costs such as those relating to licensing agreements and the establishment of spin out companies
- Redundancy costs for staff
- Depreciation on equipment or facilities
- Time preparing the proposals together with time spent on dissemination after a grant has ended.

Please note this is not an exhaustive list. If you have any questions about costing, please contact CrossClusterPOC@stfc.ac.uk.

Annex 3

Subsidy Control

Following Brexit on 1st of January 2020 State aid law no longer applies to the UK, except where aid is within scope of the Withdrawal Agreement, specifically related to Northern Ireland Protocol or in relation to certain EU programmes and activities.

Public authorities awarding subsidies are required to comply with international agreements depending on the scope of their subsidies.

Subsidy defined in the UK-EU Trade Co-operation Agreement (TCA) is a public authority granting a contribution (financial or in kind) to an enterprise, conferring an economic advantage which has or could have effect on trade or investment between UK and EU, any World Trade Organisation member or a country with whom the UK has a Free Trade Agreement with. For more information see the Guidance on the UK's international subsidy control commitments <https://www.gov.uk/government/publications/complying-with-the-uks-international-obligations-on-subsidy-control-guidance-for-public-authorities>

The proposed subsidy under this call will be outside the scope of the TCA as it will be given to potential applicants who have received subsidies of less than 325,000 Special Drawing Rights (SDR) (approximately £315,000) over a three-year consecutive fiscal period. Any European Community grants declared by the applicants will be added to that same period.

Any guidance outlined within this document or related document is not a substitute for taking independent advice (including legal advice). It is the responsibility of the Lead Applicant to read the Trade and Cooperation Agreements (and implementing legislation) and the Guidance and seek independent legal advice before submitting an application.

Annex 4

Key Contact Details

For general queries and to request a copy of the application form and supporting documentation, please contact: CrossClusterPOC@stfc.ac.uk.

For specific queries relating to the highlight in quantum computing, please contact: nqccinfo@nqcc.ac.uk

Call Management

If you would like to learn more about this call or explore our facilities and other collaborative opportunities before submitting your application, please contact Lee or Jess:

- Jessica Brush, Graduate Cluster Development Manager
(jessica.brush@stfc.ac.uk)
- Lee Glassbrook, Campus Development Manager
(lee.glassbrook@stfc.ac.uk).

National Quantum Computing Centre

If you would like to learn more about the National Quantum Computing Centre (NQCC), engage directly with the NQCC or discuss your project with a member of NQCC staff prior to submitting an application, please contact Geoff Barnes.

- Geoff Barnes, NQCC Business Development Manager
(geoff.barnes@stfc.ac.uk).

Cluster Development Managers

If you would like advice on the most appropriate cluster organisation to work with, or would like to be connected to a cluster organisation, please contact one of the Cluster Development Managers:

- Joanna Hart, Harwell Space Cluster Development Manager
(Joanna.Hart@stfc.ac.uk)
- Emma Southwell-Sander, Harwell EnergyTec Cluster Development Manager
(Emma.Southwell-Sander@stfc.ac.uk)
- Adrian Hill, Harwell HealthTec Cluster Development Manager
(Adrian.hill@stfc.ac.uk)
- Phil Carvil, North West HealthTec Cluster Development Manager
(Philip.carvil@stfc.ukri.org)
- James Bedford, Digital Cluster Development Manager
(james.bedford@stfc.ac.uk).

Facilities, Centres, and Campus Capabilities at Hartwell and Sci-Tech Daresbury

If your project partner is a facility, centre or capability at Harwell or Sci-Tech Daresbury you must discuss and agree all responsibilities, roles and rights of collaborating parties in advance of submitting your application. Please contact named individual below:

Harwell:

- ISIS Neutron & Muon Spallation Source ([Graham Appleby](#))
- Central Laser Facility ([Kathryn Welsby](#))
- Research Complex at Harwell ([Alison Oliver](#))
- ESA ECSAT ([Martine Denis](#))
- Diamond Light Source ([Elizabeth Shotton](#))
- RAL Space ([Robert Elliot](#))
- Energy Systems Catapult ([Tim German](#))
- Satellite Applications Catapult ([John Vesey](#))
- Medical Research Council ([Hilary Gates](#))
- UK Health Security Agency ([Simon Bouffler](#))
- STFC Technology Department
- UKAEA Culham (please contact call coordinator)
- STFC ITAC ([Arun Magon](#)/ [Mark Burrows](#))
- The Faraday Institute ([Ian Ellerington](#))
- The Rosalind Franklin Institute ([Laura Holland](#)).

Sci-Tech Daresbury:

- The Hartree Centre ([Duncan Sime](#))
- ASTeC & The Cockcroft Institute ([Helen Cattell](#))
- Campus Technology Hub ([Dave Bogg](#))
- Virtual Engineering Centre ([Andrew Levers](#))
- SuperSTEM ([Quentin Ramasse](#))
- STFC ITAC ([Delyth Edwards](#))
- STFC Technology Department (Engineering Technology Centre, Detector Systems Group, Nuclear Physics Group) ([Ian Lazarus](#))
- STFC Scientific Computing Department ([Dave Emerson](#))
- University of Huddersfield Laboratory for Ultra-Precision Surfaces ([David Walker](#))
- Innovation Agency ([Lindsay Sharples](#)).
