



Engineering and  
Physical Sciences  
Research Council

## Quantum Technology Research Hubs: Full stage

### Funding available

Total fund amount (indicative)	£100,000,000
Minimum amount per application	£15,000,000
Maximum amount per application	£19,500,000

### Start application link

<https://funding-service.ukri.org/OPP197/apply/201>

### Key dates / timeline

Event	Date	UK Time 12-hour clock
Opening date	27 June 2023	9:00am
Closing date	10 October 2023	4:00pm

### Summary

Apply for funding for EPSRC Quantum Technology (QT) Research Hubs.

Following an outline stage, successful consortia in each of the scope areas for QT Hubs are invited to submit a full proposal for a QT Research Hubs incorporating recommendations from the expert outline panel. The QT Hubs will address the scope areas described in this call document.

This EPSRC investment aims to support up to 5 QT Research Hubs.

QT Research Hubs will act as UK centres of excellence in cutting edge quantum technologies research with the aim of building a wider technology and innovation ecosystem.

The funding can be from £15 million to £19.5 million (80% full economic cost) per QT Research Hub.

Funding will be for up to 60 months.

The latest start date will be the 1 December 2024.

Only one application form should be submitted per bid.

## Who can apply

Before applying for funding, check the following:

- [the EPSRC eligibility guidance for applicants](#)
- [the eligibility of your organisation](#)
- [your eligibility as an individual](#)

## Who is eligible to apply

**You can only apply for this funding opportunity if we have invited you to do so following a successful outline application.**

UKRI has introduced new role types for funding opportunities being run on the new Funding Service.

Before applying for funding, check the following:

- [the EPSRC eligibility guidance for applicants](#)
- [the eligibility of your organisation](#)
- [your eligibility as an individual](#)

Standard EPSRC eligibility rules apply. Research grants are open to:

- UK higher education institutions
- research council institutes
- UKRI-approved independent research organisations
- eligible public sector research establishments
- eligible research and knowhow organisations
- NHS bodies with research capacity

[Check if your institution is eligible for funding.](#)

You can apply if you are a resident in the UK and meet at least 1 of the following conditions:

- are employed at the submitting research organisation at a level equivalent to lecturer or above
- hold a fixed-term contract that extends beyond the duration of the proposed project, and the host research organisation is prepared to give you all the support normal for a permanent employee
- hold an EPSRC, Royal Society or Royal Academy of Engineering fellowship aimed at later career stages
- hold fellowships under other schemes (please contact EPSRC to check eligibility, which is considered on a case-by-case basis).

Holders of postdoctoral level fellowships are not eligible to apply for an EPSRC grant.

## Who is not eligible to apply

You may only submit 1 full proposal as a principal investigator. You can be a co-Investigator on more than 1 outline submission.

There will not be a limit on the number of applications that project partners or eligible institutions can partner on.

Only 1 application form should be submitted per bid.

## Resubmissions

We will not accept uninvited resubmissions of projects that have been submitted to UKRI or any other funder.

Find out more about [EPSRC's resubmissions policy](#).

## Equality, diversity, and inclusion

We are committed to achieving equality of opportunity for all funding applicants. We encourage applications from a diverse range of researchers.

We support people to work in a way that suits their personal circumstances. This includes:

- career breaks
- support for people with caring responsibilities
- flexible working
- alternative working patterns

Find out more about [equality, diversity and inclusion at UKRI](#).

# What we are looking for

## Scope

The QT Research Hubs will be expected to act as UK centres of excellence in cutting edge quantum technologies research. They will bring together teams of multi-disciplinary academic researchers; thereby developing the next generation of quantum technology researchers, academic leaders and entrepreneurs.

They will act as a focus for industry, government, and other stakeholder involvement in QT research, supporting a vibrant technology innovation ecosystem and fostering links with appropriate quantum, infrastructure, and fabrication facilities.

The aim of this funding opportunity is to fund a portfolio of QT Research Hubs that cover the following scope areas. We intend to make at least 1 award in each of these areas. Applications will therefore be expected to address 1 of the scope areas described. Applications will need to address the majority of the scope bullet points to ensure that the vision in that area can be realised with the funding available. Applications may cover more than 1 call scope area.

### **Quantum networks for distributed entanglement**

This would cover the areas of quantum communication, computing and sensing and include underpinning technology in control systems, and integration. Broad research topics to be addressed include:

- quantum networks at different scales
- scaling quantum communications
- distributed quantum computing
- quantum safe communications

### **Quantum computing research to improve quantum computing performance**

Investments in this scope area would work in collaboration with the National Quantum Computing Centre. Broad research topics to be addressed include:

- hardware development (qubit performance, noise sources, calibration, and control platform specific and cross platform protocols to be explored)
- error mitigation and error correction
- benchmarking, verification, theory, and standards
- development and execution of applications for noisy intermediate scale quantum platforms and fault tolerant platforms
- community building through multi-disciplinary science networks for example integration of high-performance computing and quantum computing

### **Engineering quantum technology devices and components for sensing, imaging, positioning, and timing.**

Broad research topics to be addressed include:

- quantum systems integration
- scale up and manufacturability
- integrated optics
- hybrid systems
- working with application domains to understand how to achieve the full potential of quantum components and devices

EPSRC anticipates funding more than 1 QT Research Hub in this area, with no single investment expected to cover its full breadth. Any application should demonstrate a good coverage of the area.

## Expectations

In addition, all QT Research Hubs will each be expected to:

- act as a UK centre of excellence, able to harness existing strengths from across the research landscape, through consortia that bring together researchers and research translators in relevant areas such as engineering, information and communications technology, computer science, mathematical sciences, and physics
- focus on challenges associated with translation of quantum technology to application areas, addressing the scope areas identified
- include relevant underpinning and enabling science for the scope areas for example materials and components
- offer visionary leadership, with the ability to collaborate with the other QT Research Hubs and the wider community to champion the area and the UK QT community
- have significant engagement with industry and other stakeholders, as this is essential to continue to contribute to the development of a quantum technologies industry base in the UK. This includes developing an interface that allows easy engagement for industry and user communities
- deliver its programme of work in a responsible fashion according to best practice in responsible research and innovation
- integrate with other relevant UK, UKRI and National Quantum Technologies Programme investments where appropriate

## Duration

The duration of this award is 60 months.

Projects must start by 1<sup>st</sup> December 2024.

## Funding available

Research funding is available to support up to 5 QT Research Hubs with a significant budget. The funding can be from £15 million to £19.5 million (80% full economic cost) per QT Research Hub.

EPSRC will fund 80% of the full economic cost.

Proposals should focus on the research programme with some flexibility to take advantage of opportunities for new partnerships or changes in how the area develops. Bids should not include a ringfenced budget for new partnerships as the community will be expected to take advantage of other funding opportunities EPSRC provides.

Although this is not a funding opportunity designed for significant capital expenditure, equipment over £10,000 in value (including VAT) and up to £400,000 is available through this funding opportunity.

Additional justification of the requirement for individual items of equipment between £10,000 and £400,000, and details of the proposed contribution to the cost of the equipment, must be provided in the justification of resources.

For any items or combined assets with a value above £138,000 (including VAT) a 2-page equipment business case must also be included at the invited full proposal stage.

Smaller items of equipment (individually under £10,000) should be in the 'Directly Incurred - Other Costs' heading.

[EPSRC approach to equipment funding.](#)

## Stakeholder Engagement

With this funding opportunity EPSRC aims to maximise impact through engagement, collaboration, and co-creation with industrial, policy and third sector stakeholders.

Programmes should have a strategy for engaging with stakeholders, both academic and non-academic, across and beyond EPSRC's remit. This should include plans to interact with a new and emerging range of relevant collaborators throughout the lifetime of the grant. Applicants should provide clear evidence of genuine, substantive partnerships, with co-creation and co-delivery of projects and activities in addition to financial contributions.

EPSRC expects programmes to secure significant leverage, both financial and in-kind, from stakeholders. The amount should be commensurate with the sector involved (for example, SMEs are not expected to provide the same level of financial contribution as multinational corporations), but EPSRC expects leverage to grow over the lifetime of the programme as stakeholder relationships progress and new partnerships are formed.

Applicants should consider how they will embed stakeholder interactions in the programme's governance structure. In particular, advice from users must be appropriately utilised in the decision-making strategy to grow diverse user engagement, both in terms of number of users

and value of contributions to the programme (financial and in-kind). Relationships with stakeholders should evolve as appropriate as the programme and the research develops.

The research and innovation landscape for quantum technology is diverse and reaches across the UK. In recognition of the national role that the awards will play in the EPSRC portfolio, we expect applicants to demonstrate how they will engage and collaborate with quantum technology stakeholders across the UK.

To evidence your strong partnerships, you must include **at least one** project partner letter with letter of support. You may include up to 30 Project Partner Letters of Support for your Hub proposal. These letters should be from Project Partners who will have a substantial involvement with the Hub.

## Enhancing collaboration

EPSRC expects that programmes of this nature will require the integration of multiple stakeholders and broad interdisciplinary teams. Therefore, to maximise the value of this activity to the wider community, text from the 'summary' Je-S section for the successful outlines, along with the principal investigator name and institution, can be found in the Additional information section of the outline call document funding page ([EPSRC Quantum Technology Research Hubs: outline stage – UKRI](#)).

This aims to support potential additional partners to identify, approach and join programmes. Any investigators involved in outlines that were not invited to the full stage are encouraged to engage with those that are invited, where appropriate, as the full stage proposal interdisciplinary consortia are further developed and refined.

## Management and Monitoring

Programmes should:

- have effective management and monitoring arrangements for the investment. This should include a risk management strategy and a strategy for how the flexibility of resources will be managed.
- establish and run an independent advisory board, or equivalent body, to provide advice and recommendations on the strategic, scientific and research direction and activities.
- consider costing in programme management and other administrative support, for example by employing a full-time equivalent programme manager, and not relying on the principal investigator for these duties.
- include plans for the development and promotion of the careers of all team members, including investigators, research assistants, technicians, administrative and programme management staff, and any aligned students.

## Responsible Research & Innovation

Whilst developing your proposals, please address Responsible Research and Innovation as an integral part of your vision.

You are expected to work within the [EPSRC framework for responsible innovation](#) with focus on [AREA](#) (Anticipate, Reflect, Engage, Act) to maximise the positive values and benefits of your research and minimise potential unintended negative societal, environmental, and ethical impacts. Within your proposal we expect you to address the Anticipate and Reflect parts of the [AREA](#) Framework and articulate appropriate plans for Engage and Act in the context of your research programme.

Within this context you are expected to:

- promote opportunities for science and innovation that are socially desirable and undertaken in the public interest
- conduct their work in an ethical and legal manner
- reflect on your own personal and collective motivations for conducting your research
- inform EPSRC and your own research organisations about any concerns, dilemmas and opportunities revealed by the responsible research and innovation process as these become apparent. It is expected that principles of Responsible Research and Innovation will be embedded throughout your research programme and plans will be regularly revisited and revised as appropriate.
- consider how two-way public engagement fits as part of your work. Guidance on planning and delivering high quality two-way public engagement can be found on the
- consider how public engagement fits as part of their work as described on the [UKRI Public Engagement pages](#) and via the NCCPE (<https://www.publicengagement.ac.uk/>).

There are many resources available that can help you to develop your approach, including potential support and expertise at your university. A few widely available ones in addition to the EPSRC framework include:

- [UKRI Good Research Resource Hub](#)
- [UKRI Trustworthy Autonomous Systems \(TAS\) Hub RRI Prompt Cards](#)
- [Observatory for Responsible Research and Innovation in ICT \(Orbit\), RRI](#)
- [Alan Turing Institute: training modules on RRI/PE](#)
- [European Framework FP7 funded RRI Toolkit](#)



## International collaboration

If your application includes international applicants, project partners or collaborators, visit [Trusted Research](#) for more information on effective international collaboration while protecting intellectual property, sensitive research and personal information.

This includes new as well as existing partnerships as boundaries and affiliations can change in the advancement of technology development.

UK Research and Innovation (UKRI) established its trusted research and innovation (TR&I) work programme in response to the increasing need across the sector to:

- help manage and provide guidance and support in ensuring collaborative activities are done safely and securely
- minimise the risks associated with operating within a global research and innovation ecosystem while maximising the opportunities.

Guidance can be found on the [National Protective Security Authority \(NPSA\)](#) and [Trusted research and innovation – UKRI](#) websites.

## Supporting skills and talent

We encourage you to follow the principles of the [Concordat to Support the Career Development of Researchers](#) and the [Technician Commitment](#).

# How to apply

## UK Research and Innovation (UKRI) Funding Service

We are running the funding opportunity on the new UKRI Funding Service. You cannot apply for this opportunity on the Joint Electronic Submissions (Je-S) system.

If you do not already have an account with the UKRI Funding Service, you will be able to create one by selecting the 'start application' button at the start of this page. Creating an account is a 2-minute process requiring you to verify your email address and set a password.

If you are a member of an organisation with a research office that we do not have contact details for, we will contact them to enable administrator access. This provides:

- oversight of every UKRI Funding Service application opened on behalf of your organisation
- the ability to review and submit applications

Research offices that have not already received an invitation to open an account should email [support@funding-service.org](mailto:support@funding-service.org).

To find out more about the role of research office professionals in the application process, watch a [recording of a recent research office webinar on YouTube](#).

## Submitting your application

Collaborative applications should be prepared and submitted by the lead research organisation through a single application on the Funding Service. The content of the application should be co-created with input from all investigators and project partners and should represent the proposed work of the entire consortium.

To apply:

1. Select the 'Start application' button at the start of this page.
2. This will open the 'Sign in' page of UKRI's Funding Service. If you do not already have an account, you'll be able to create one. This is a 2-minute process requiring you to verify your email address and set a password.
3. Start answering the questions detailed in this section of 'How to apply'. You can save your work and come back to it later. You can also work 'offline', copying and pasting into the text boxes provided for your answers.
4. Once complete, use the service to send your application to your research office for review. They'll check it and return it to you if it needs editing.
5. Once happy, your research office will submit it to UKRI for assessment. Only they can do this.

## Deadline

EPSRC must receive your application by 10 October 2023 at 16:00 UK time.

You will not be able to apply after this time.

You should ensure you are aware of and follow any internal institutional deadlines that may be in place.

EPSRC, as part of UKRI, will need to collect some personal information to manage your funding service account and the registration of your funding applications.

We will handle personal data in line with UK data protection legislation and manage it securely.

For more information, including how to exercise your rights, read our [privacy notice](#).

EPSRC UKRI will publish the outcomes of this funding Opportunity at [Grants on the Web \(ukri.org\)](#).

If your application is successful, some personal information will be published via the [UKRI Gateway to Research](#).

## UKRI Funding Service: section guidance

### Summary

**Word count:** 550

#### **Guidance for writing a summary**

In plain English, provide a summary that can be sent to potential reviewers to determine if your proposal is within their field of expertise.

This summary may be made publicly available on external facing websites, so please ensure it can be understood by a variety of readers, for example:

- opinion-formers
- policymakers
- the general public
- the wider research community.

Succinctly describe your proposed work in terms of:

- its context
- the challenge the project addresses and how it will be applied to this
- its aims and objectives
- its potential applications and benefits.

## Applicants

List the key members of your team and assign them roles, for example:

- project lead (PL)
- project co-lead (UK) (PcL)
- researcher co-lead (RcL)
- specialist
- grant manager
- professional enabling staff
- research and innovation associate
- technician
- visiting researcher

You should only list 1 individual as principal investigator.

You can only list one project lead.

The applicant role guidance is listed here [Eligibility as an individual – UKRI](#).

## 1 Section: Vision and Approach

**Question:** What are you hoping to achieve with and how will you deliver your proposed work?

**What the assessors are looking for in your response:**

For the vision explain how your proposed work:

- addresses one or more of the research scope areas
  - is of excellent quality and importance within or beyond the field(s) or area(s)
  - has the potential to advance current understanding, generates new knowledge, thinking or discovery within or beyond the field or area
  - is timely given current trends, context and needs
  - impacts world-leading research, society, the economy or the environment
  - must articulate the overall research vision of the research programme and how this meets the scope area.
- 
- expected that the research vision will be ambitious, transformative and would result in a significant step change in knowledge and understanding that will have a major impact on the research area.
  - meets national strategic needs by ensuring that the UK maintains its international standing in quantum technology
  - fits with and complements other UK research already funded in the area or related areas, including the relationship to the EPSRC and the National Quantum Technologies Programme portfolio.

**Within the Vision section we also expect you to:**

- identify the potential direct or indirect benefits and who the beneficiaries might be

**For the Approach, explain how you have designed your work so that it:**

- is effective and appropriate to achieve your objectives
- is feasible, and comprehensively identifies any risks to delivery and how they will be managed
- if applicable, uses a clear and transparent methodology
- if applicable, summarises the previous work and describes how this will be built upon and progressed
- clearly state why the challenges are ambitious; applicants should set the proposed technology research in context of the current state of knowledge and other work under way in the field.
- The technology research programme should also be sustainable beyond the lifetime of the grant and have significant impact beyond its immediate group.
- must demonstrate strong user engagement and partnership approach. There should be clear plans to develop these to the benefit of the QT Research Hub that open up translation pathways and benefit the broader UK quantum technology ecosystem.
- must articulate who will benefit from the research and how they will benefit. Plans should be described to disseminate results, exchange knowledge and build collaborations.
- must describe the governance and demonstrate that there is a clear management plan. This will ensure that resources, including staff resource are deployed in the most effective way to deliver high quality research outputs that have the potential to induce a step-change in the knowledge of the subject area.
- expected that the deliverables and milestones will be routinely reviewed to ensure that the most promising lines of research are pursued and that a strategy will be in place to seek independent external advice. Sufficient resources are assigned to ensure the project is professionally managed.
- must demonstrate strong institutional commitment from all higher education institutes involved in the QT Research Hub. Proposals should demonstrate alignment to other relevant large UKRI and NQTP investments at the institutions involved.

You should upload the Vision and Approach document as a 10-page PDF, plus an additional page for a project plan. The document must have single line spacing, margins of at least 2cm and be typed using Arial 11pt, or another 'sans serif' font with an equivalent size to Arial 11pt. The document has to be a maximum size of 8 MB.

You may include images, graphs, tables, provided you adhere to the page length rule and bear in mind that you can only upload 1 PDF and its file size cannot be larger than 8MB.

For the file name, use the unique funding service number the system gives to your proposal - when you create an application – immediately followed by the words 'Vision and Approach'. Then use the upload button below.

If the attachment does not meet these requirements, the application will be rejected.

Unless specifically requested, please do not include any personal data within the attachment.

Once you have uploaded, enter 'attachment provided' in the textbox, mark this section as complete and move to the next one.

## 2 Section: Hub leadership and management

**Word Count:** 1000

**Question:** What are your plans for appropriate Hub management and leadership?

**What the assessors are looking for in your response:**

Describe the leadership structure and how the programme of work will be managed. Outline how the technology translation process will be managed as part of the overall management structure.

Explain how you intend to:

- manage and monitor the progress of the programme, including consideration of how the flexibility of resources will be managed
- embed creativity and agility into the plans for the programme in order to respond to a changing landscape
- develop and progress the careers of all team members, including investigators, research assistants, any aligned students, technicians and other non-academic staff
- embed considerations of equality, diversity, and inclusion at all levels and in all aspects of the programme

Please identify the percentage of time the director and leadership team will be spending on the project.

The combined director and leadership time charged to the grant for delivery of the QT Research Hub should be approximately 1 full time effort (FTE).

The leadership team will be expected to spend 0.2 FTE on responsible research and innovation, equality, diversity and inclusion, succession planning and development of future research leaders. Time to do research for the leadership team will need to be in addition to this. Each QT Research Hub will require a minimum of a FTE in each of the following roles:

- hub manager
- communications manager
- business development manager

An estimated level of resource for directly incurred costs should be provided.

Please be advised, these roles will need to be added to the TFS system under the following new titles (**BOLD**) (please select as appropriate):

- **Project lead (PL)** (Principal Investigator)

- **Project co-lead (UK) (PcL)** (Co-Investigator)
- **Grant manager** (Director of Hub)
- **Professional enabling staff** (Leadership Team including Hub Manager, Communications Manager, Business Development Manager.)

Please use text box provided to enter information.

### 3 Section: Co-created research programme

**Word Count:** 1000

**Question:** How have you co-created and designed your research programme to maximise the impact of the Hub activity?

**What the assessors are looking for in your response:**

Explain how you have designed your research programme so that it:

- has been co-created and will be co-delivered in partnership with relevant stakeholders
- identifies and embeds clear, realistic and proportionate pathways to maximise translation of outputs into outcomes and impacts of all types
- drives added value as a core focus of the programme by demonstrating synergistic connectivity between partners, disciplines, and workstreams

### 4 Section: Your Organisation's Support

### 5 Section: Applicant and team capability to deliver

**Word count:** 1500

**Question:** Why are you the right individual or team to successfully deliver the proposed work?

**What the assessors are looking for in your response:**

Evidence of how you, and if relevant your team, have:

- the relevant experience (appropriate to career stage) to deliver the proposed work
- the right balance of skills and expertise to cover the proposed work
- the appropriate leadership and management skills to deliver the work and your approach to develop others
- contributed to developing a positive research environment and wider community
- membership must bring together consortia of international standing and demonstrate an established record of relevant technology research. It should clearly and purposefully contribute to the scope stated in the funding opportunity.
- should present a strong, multidisciplinary partnership of researchers with the necessary skills to be able to deliver the Quantum Technology Research Hub.

- must demonstrate that the research is of the highest quality and will be undertaken by a world-leading team.
- director and leadership team need to not only be leaders in their field, but also be able to establish consensus, motivate their staff and take executive action to ensure the research objectives are met. Furthermore, they need to demonstrate their ability to make international linkages, influence research agendas and act as champions for the QT community.
- must describe the plans for improving and monitoring ED&I during the Hubs lifetime. The plans for succession planning and developing future research leaders should also be described.

The word count for this section is 1,500 words, 1,000 words to be used for R4RI modules and, if necessary, a further 500 words for Additions.

Use the Résumé for Research and Innovation (R4RI) format to showcase the range of relevant skills you and, if relevant, your team (project and project co-leads, researchers, technicians, specialists, partners and so on) have and how this will help deliver the proposed work. You can include individuals' specific achievements but only choose past contributions that best evidence their ability to deliver this work.

Complete this section using the R4RI module headings listed. Use each heading once and include a response for the whole team, see the [UKRI guidance on R4RI](#). You should consider how to balance your answer, and emphasise where appropriate the key skills each team member brings:

- contributions to the generation of new ideas, tools, methodologies, or knowledge
- the development of others and maintenance of effective working relationships
- contributions to the wider research and innovation community
- contributions to broader research or innovation users and audiences and towards wider societal benefit

### **Additions**

Provide any further details relevant to your application. This section is optional and can be up to 500 words. You should not use it to describe additional skills, experiences, or outputs, but you can use it to describe any factors that provide context for the rest of your R4RI (for example, details of career breaks if you wish to disclose them).

Complete this as a narrative. Do not format it like a CV.

UKRI has introduced new role types for funding opportunities being run on the new Funding Service.

## **6a Section: Project partners: contributions**

**Word count:** 1000

**Question:** provide details about any project partners' contributions using the template provided.

**What the assessors are looking for in your response:**



If you do not have any project partners, simply add 'N/A' into the text box, mark this section as complete and move to the next section.

If you do have project partners, [download and complete the project partner contributions template \(DOCX, 52KB\)](#) then copy and paste **only** the table within it into the text box below.

Ensure you have obtained prior agreement from project partners that, should you be offered funding, they will support your project as indicated in the template.

## **6b Section: Project Partners: letters (or emails) of support**

**Question:** upload a single PDF containing the letters or emails of support from each partner you named in the table in the previous 'contributions' section, enter the words 'attachment supplied' in the text box below.

If you do not have any project partners, simply add 'N/A' into the text box, mark this section as complete and move to the next section.

If you have named project partners in the previous 'contributions' section, enter the words 'attachment supplied' in the text box below.

Each letter or email you provide should:

- confirm the partner's commitment to the project
- clearly explain the value, relevance, and possible benefits of the work to them
- describe any additional value that they bring to the project
- please refer to [EPSRC's guide](#) for more guidance.

Please do not provide letters of support from host and Co-Investigator's research organisations.

Unless specifically requested, please do not include any personal data within the attachment.

Upload details are provided within the service on the actual application.

For audit purposes, UKRI requires formal collaboration agreements to be put in place if an award is made.

Upload a single PDF containing the letters or emails of support from each partner you named in the table in the previous 'contributions' section ensuring it is no larger than 8MB.

For the file name, use the unique funding service number the system gives to your proposal - when you create an application – immediately followed by the words 'Project Partner Letters of Support'. Then use the upload button below.

Unless specifically requested, please do not include any personal data within the attachment.

Once you have uploaded, mark this section as complete and move to the next one.

## 7 Section: Facilities

**Word Count:** 500

**Question:** Does your proposed research require the support and use of a facility?

### **What the assessors are looking for in your response**

If not, enter N/A into the text box, mark this section as complete and move on to the next section.

If you will need to use a facility, you should follow your proposed facility's normal access request procedures. Where prior agreement is required, ensure you obtain their agreement that, should you be offered funding, they will support the use of their facility on your project.

In the text box, for each requested facility you should provide:

- the name of facility, copied and pasted from [this list](#)
- the proposed usage or costs, or costs per unit where indicated on that list
- confirmation you have their agreement where required

Do not put the facility contact details in your response.

## 8 Section: Outsourcing

**Word Count:** 500

**Question:** Are you outsourcing any Hub-related activity?

### **What the assessors are looking for in your response:**

UKRI recognises that in some instances, it may be appropriate to outsource elements of the proposed work. If that is the case in this application, please provide the following information:

- the scope of the outsourced activity, that means what is being undertaken and what will be delivered
- the relevance of the outsourced activity to the application
- why the outsourced activity cannot be undertaken in house
- why this provider is the most appropriate
- the cost or costs of the outsourced activity and the tendering process that has been followed.

Please provide any goods and services quotations.

Upload a single PDF containing any goods and services quotations ensuring it is no larger than 8MB.

For the file name, use the unique funding service number the system gives to your proposal - when you create an application – immediately followed by the words 'Outsourcing Quotations'. Then use the upload button below.

Unless specifically requested, please do not include any personal data within the attachment.

Once you have uploaded, mark this section as complete and move to the next one.

## 9 Section: References

**Word Count:** 1000

**Question:** List the references you've use to support your application.

**What the assessors are looking for in your response:**

Ensure your application is a self-contained description.

You can provide hyperlinks to relevant publications or online resources. However, assessors are not obliged to access the information they lead to or consider it in their assessment of your application.

You must not include links to web resources in order to extend your application.

If linking to web resources, to ensure the information's integrity is maintained include, where possible, persistent identifiers such as digital object identifiers.

## 10 Section: Resources and Costs

**Word Count:** 1000

**Question:** List the Justification of Resources requested.

**What the assessors are looking for in your response:**

Justify the application's more costly resources, in particular:

- project staff
- significant travel for field work or collaboration (but not regular travel between collaborating organisations or to conferences)
- any equipment that will cost more than £10,000
- any consumables beyond typical requirements, or that are required in exceptional quantities
- all facilities and infrastructure costs
- all resources that have been costed as 'Exceptions'

Assessors are not looking for detailed costs or a line-by-line breakdown of all project resources. Overall, they want you to demonstrate how the resources you anticipate needing for your proposed work:

- are comprehensive, appropriate, and justified
- represent the optimal use of resources to achieve the intended outcomes
- maximise potential outcomes and impacts

## 11 Section: Ethics and Responsible Research and Innovation (RRI)

**Word count: 500**

**Question:** What are the ethical or RRI implications and issues relating to the proposed work? If you do not think that the proposed work raises any ethical or RRI issues, explain why.

### **What the assessors are looking for in your response:**

Using the text box, demonstrate that you have identified and evaluated the relevant ethical or responsible research and innovation considerations, and how you will manage them.

There are a large number of resources available that can help you to develop your approach, including expertise at your university. A few widely available ones include:

- [EPSRC framework for responsible innovation](#)
- [Trustworthy Autonomous Systems Hub](#)
- [ORBIT RRI \(orbit-rrl.org\)](http://orbit-rrl.org)

You are expected to work within the [EPSRC framework for responsible innovation](#) with focus on [AREA](#) (Anticipate, Reflect, Engage, Act) to ensure that opportunities for science research and innovation are promoted that are socially desirable and undertaken in the public interest. We expect applicants to address the Anticipate and Reflect parts of the [AREA](#) Framework and articulated appropriate plans for Engage and Act in the context of their research programme.

With expectation to:

- conduct their work in an ethical and legal manner
- reflect on their own personal and collective motivations for conducting their research
- anticipate, reflect and engage on the wider ethical and societal impacts, implications and value of their work, entering into dialogue with the public and other stakeholders where appropriate, and respecting the views of others
- inform EPSRC and their own research organisations about any concerns, dilemmas and opportunities revealed by the responsible research and innovation process as these become apparent. It is expected that plans will be revisited periodically.
- consider how public engagement fits as part of their work and are able to draw upon the expertise of the NCCPE (<https://www.publicengagement.ac.uk/>).

If you are collecting or using data you should identify:

- any legal and ethical considerations of collecting, releasing or storing the data including consent, confidentiality, anonymisation, security and other ethical considerations and, in particular, strategies taken to not preclude further re-use of data
- formal information standards with which study will be compliant

Using the text box, demonstrate that you have identified and evaluated the relevant ethical or responsible research and innovation considerations, and how you will manage them.

If you are collecting or using data you should identify:

- any legal and ethical considerations of collecting, releasing or storing the data including consent, confidentiality, anonymisation, security and other ethical considerations and, in particular, strategies taken to not preclude further re-use of data
- formal information standards with which study will be compliant

## 12 Section: Genetic and Biological Risk

**Word count: 700**

**Question:** does your proposed research involve any genetic or biological risk?

**What the assessors are looking for in your response:**

If not, enter 'N/A' into the text box, mark this section as complete and move on to the next section.

In respect of animals, plants or microbes, are you proposing to:

- use genetic modification as an experimental tool, like studying gene function in a genetically modified organism
- release genetically modified organisms
- ultimately develop commercial and industrial genetically modified outcomes?

If yes, provide the name of any required approving body and state if approval is already in place. If it is not, provide an indicative timeframe for obtaining the required approval.

Identify the organism or organisms as a plant, animal or microbe and specify the species and which of the three categories the research relates to.

Identify the genetic and biological risks resulting from the proposed research, their implications and any mitigation you plan on taking. Assessors will want to know you have considered the risks and their implications to justify that any identified risks do not outweigh any benefits of the proposed research.

## 13 Section: Research involving the use of animals

Word count: 10

**Question:** does your proposed research involve the use of vertebrate animals or other organisms covered by the Animals Scientific Procedures Act?

**What the assessors are looking for in your response:**

If not, enter 'N/A' into the text box, mark this section as complete and do the same for the next question.

If you are proposing research that requires using animals, write 'Yes' in the text box. Then, [download and complete this document](#) (DOCX, 74KB), which contains all the questions relating to research using vertebrate animals or other Animals (Scientific Procedures) Act 1986 regulated organisms. Then, save it as a PDF.

Upload as a single PDF ensuring it is no larger than 8MB.

For the file name, use the unique funding service number the system gives to your proposal - when you create an application – immediately followed by the words 'Research Involving the Use of Animals'. Then use the upload button below.

Unless specifically requested, please do not include any personal data within the attachment.

Once you have uploaded, mark this section as complete and move to the next one.

## 14 Section: Conducting research with animal overseas

Word count: 700

**Question:** will any of the proposed animal research be conducted overseas?

**What the assessors are looking for in your response:**

If not, enter 'N/A' in the text box, mark as complete and move to the next question.

If you are proposing to conduct overseas research, it must be conducted in accordance with welfare standards consistent with those in the UK, as per [Responsibility in the Use of Animals in Bioscience Research](#), on page 14.

You should also ensure all named applicants in the UK and overseas are aware of this requirement and provide a statement below to confirm that:

- all named applicants are aware of the requirements and have agreed to abide by them
- this overseas research will be conducted in accordance with welfare standards consistent with the principles of UK legislation
- the expectation set out in '[Responsibility in the Use of Animals in Bioscience Research](#)' will be applied and maintained
- appropriate national and institutional approvals are in place.

Overseas studies proposing to use non-human primates, cats, dogs, equines or pigs, will be assessed during [NC3Rs review](#) of research proposals. The required information should be provided by completing the template from the question 'Research Involving the use of animals'.

For studies involving other species listed below, you should select the relevant checklist or checklists from the list below, complete it and save it as a PDF and use the file upload feature to attach. If you need to complete more than one checklist, you should merge them into a single document and then save it as a PDF before uploading it.

- [Additional questions on the use of rodents overseas.](#)
- [Additional questions on the use of rabbits overseas.](#)
- [Additional questions on the use of sheep overseas.](#)
- [Additional questions on the use of goats overseas.](#)
- [Additional questions on the use of pigs overseas.](#)
- [Additional questions on the use of cattle overseas.](#)
- [Additional questions on the use of \*Xenopus laevis\* and \*Xenopus tropicalis\* overseas.](#)

Upload as a single PDF ensuring it is no larger than 8MB.

For the file name, use the unique funding service number the system gives to your proposal - when you create an application – immediately followed by the words 'Conducting research with animal overseas'. Then use the upload button below.

Unless specifically requested, please do not include any personal data within the attachment.

Once you have uploaded, mark this section as complete and move to the next one.

## 15 Section: Research involving human participation

Word count: 700

**Question:** will the project involve the use of human subjects or their personal information?

**What the assessors are looking for in your response:**

If not, enter 'N/A' into the text box, mark this section as complete and move on to the next section.

If you are proposing research that requires the involvement of human subjects, provide the name of any required approving body and whether approval is already in place. Then, justify the number and the diversity of the participants involved, as well as any procedures.

Provide details of any areas of substantial or moderate severity of impact.

## **16 Section: Research involving human tissues or biological samples**

**Word count: 700**

**Question:** does your proposed research involve the use of human tissues, or biological samples?

**What the assessors are looking for in your response:**

If not, enter 'N/A' into the text box, mark this section as complete and move on to the next section.

If you're answering 'yes', provide the name of any required approving body and whether approval is already in place.

You should justify the use of human tissue or biological samples specifying the nature and quantity of the material to be used and its source.

## **How we will assess your application**

### **Assessment process**

Invited full proposals will be sent to independent national and international peer reviewers. The postal peer reviewers' role will primarily be to comment on the quality of the proposed research. This is to provide quality assurance of the QT Research Hub proposals.

Prior to the interview panel, usable reviewer comments that were included in the decision process will be sent to you. This gives you the opportunity to correct factual inaccuracies and respond to any queries raised by the reviewers in a principal investigator response document. Feedback will be provided in the form of reviewer comments.

The director and up to 3 others identified on the proposal will be allowed to attend the interview. It is up to the applicants which members of the leadership team attend the interview. There will be a formal presentation by the applicants as part of the interview. The interview panel will be provided with a copy of the feedback received by each consortium at the outline stage and will expect to see appropriate responses by the applicants to the feedback received. The interview panel will assess the proposal against the assessment criteria, using reviewers' comments, the principal investigator response and overall performance at interview.



## Portfolio balance

At both the outline and the invited full proposal stage, the expert panel and the interview panel with additional input as required, will provide advice on the selection of a balanced QT Research Hub portfolio covering the 3 funding opportunity scope areas from the highest quality proposals. The final funding decisions will be made by EPSRC.

## Peer review

We will invite experts to review your application independently, against the specified criteria for this opportunity. Each criterion directly corresponds to the assessment questions answered but consideration should also be given to the additional evidence provided such as project partner letters of support or the host organisation statement of support. You will have 10 days to respond to reviewers' comments.

## Interview

An expert interview panel will conduct interviews with applicants after which the panel will make a funding recommendation.

We expect interviews to be held in late February or early March 2024 – exact dates will be confirmed as soon as possible.

Following the panel we will email you to inform you of the funding outcome.

## Feedback

We will give feedback with the outcome of your application.

## Principles of assessment

We support the San Francisco [declaration on research assessment \(DORA\)](#) and recognise the relationship between research assessment and research integrity.

Find out about the [UKRI Principles of Assessment and Decision Making \(PDF, 176KB\)](#).

We reserve the right to modify the assessment process as needed.

## Sharing data with co-funders

We will need to share the application (including any personal information that it contains) with NQTP partners so that they can participate in the assessment process. We will consider where

co-funding would be beneficial to your proposal with other NQTP partners. If your proposal aligns to funding opportunities with other NQTP partners, we may approach you regarding additional funding conditions which may apply.

We reserve the right to modify the assessment process as needed.

## **Assessment criteria**

### **What we are looking for**

#### **Section: Vision**

##### **Have the applicants demonstrated how the work they are proposing:**

- is of excellent quality and importance within or beyond the field(s) or area(s)
- has the potential to advance current understanding, generates new knowledge, thinking or discovery within or beyond the field or area
- is timely given current trends, context and needs
- will impact world-leading research, society, the economy and/or the environment
- must articulate the overall research vision of the research programme and how this meets the scope area.
- expected that the research vision will be ambitious, transformative and would result in a significant step change in knowledge and understanding that will have a major impact on the research area.
- meets national strategic needs by ensuring that the UK maintains its international standing in quantum technology
- fits with and complements other UK research already funded in the area or related areas, including the relationship to the EPSRC and the National Quantum Technologies Programme portfolio

#### **Section: Approach**

##### **Have the applicants demonstrated that they have designed their approach so that it:**

- is effective and appropriate to achieve their objectives
- is feasible, and comprehensively identifies any risks to delivery and how they will be managed
- if applicable, uses a clear and transparent methodology
- if applicable, summarises the previous work and describes how this will be built upon and progressed
- clearly state why the challenges are ambitious; applicants should set the proposed technology research in context of the current state of knowledge and other work under way in the field.
- The technology research programme should also be sustainable beyond the lifetime of the grant and have significant impact beyond its immediate group.

- must demonstrate strong user engagement and partnership approach. There should be clear plans to develop these to the benefit of the QT Research Hub that open up translation pathways and benefit the broader UK quantum technology ecosystem.
- must articulate who will benefit from the research and how they will benefit. Plans should be described to disseminate results, exchange knowledge and build collaborations.
- must describe the governance and demonstrate that there is a clear management plan. This will ensure that resources, including staff resource are deployed in the most effective way to deliver high quality research outputs that have the potential to induce a step-change in the knowledge of the subject area.
- expected that the deliverables and milestones will be routinely reviewed to ensure that the most promising lines of research are pursued and that a strategy will be in place to seek independent external advice. Sufficient resources are assigned to ensure the project is professionally managed.
- must demonstrate strong institutional commitment from all higher education institutes involved in the QT Research Hub. Proposals should demonstrate alignment to other relevant large UKRI and NQTP investments at the institutions involved.

### **Section: Applicant and team capability to deliver**

**Have the applicants provided evidence of how they, and if relevant their team, have:**

- the relevant experience (appropriate to career stage) to deliver the proposed work
- the right balance of skills and expertise to cover the proposed work
- the appropriate leadership and management skills to deliver the work and their approach to develop others
- contributed to developing a positive research environment and wider community
- membership must bring together consortia of international standing and demonstrate an established record of relevant technology research. It should clearly and purposefully contribute to the scope stated in the funding opportunity.
- should present a strong, multidisciplinary partnership of researchers with the necessary skills to be able to deliver the Quantum Technology Research Hub.
- must demonstrate that the research is of the highest quality and will be undertaken by a world-leading team.
- director and leadership team need to not only be leaders in their field, but also be able to establish consensus, motivate their staff and take executive action to ensure the research objectives are met. Furthermore, they need to demonstrate their ability to make international linkages, influence research agendas and act as champions for the QT community.
- must describe the plans for improving and monitoring ED&I during the Hub's lifetime. The plans for succession planning and developing future research leaders should also be described.

### **Section: Resources and cost justification**

**Have the applicants demonstrated how the resources they anticipate needing for their proposed work:**

- are comprehensive, appropriate and justified

- represent the optimal use of resources to achieve the intended outcomes
- maximise potential outcomes and impacts

## **Section: Ethics and Responsible Research and Innovation (RRI)**

**Have the applicants identified and evaluated the relevant ethical and/or responsible research and innovation considerations, and how they will be managed.**

## **Contact details**

### **Get help with your application**

For help on costings and writing your application, contact your research office. Allow enough time for your organisation's submission process.

### **Ask about this funding opportunity**

#### **Ask about this funding opportunity**

Quantum Technologies Theme mailbox

Email: [QuantumTechnologies@epsrc.ukri.org](mailto:QuantumTechnologies@epsrc.ukri.org)

Please include 'Quantum Technology Research Hubs' in the subject line

Email: [support@funding-service.ukri.org](mailto:support@funding-service.ukri.org)

We aim to respond to emails within 2 working days.

Phone: 01793 547490

Our phone lines are open:

- Monday to Thursday 8:30am to 5:00pm
- Friday 8:30am to 4:30pm

### **Sensitive information**

If you or a core team member need to tell us something you wish to remain confidential, email the Funding Service helpdesk on [support@funding-service.ukri.org](mailto:support@funding-service.ukri.org).

Include in the subject line: [the funding opportunity title; sensitive information; your Funding Service application number].

Typical examples of confidential information include:

- applicant is unavailable until a certain date (for example due to parental leave)
- declaration of interest
- additional information about eligibility to apply that would not be appropriately shared in the 'applicant and team capability' section

- conflict of interest for UKRI to consider in reviewer or panel participant selection
- the application is an invited resubmission

For information on how UKRI handles privacy data please see [UKRI's privacy notice](#).

## Additional information

### Background

EPSRC as part of the National Quantum Technologies Programme (NQTP) started a process to develop the funding opportunity for QT Research Hubs from 2024 to 2029 in January 2022.

This was to ensure the momentum and capabilities developed by the phase 1 and phase 2 QT Research Hubs was not lost and the community were able to plan for the 5 years from 2024 to 2029.

This funding opportunity is open to applications from existing and new QT Research Hubs.

EPSRC held roundtables and workshops with the academic community to develop the funding opportunity scope as well as consulting with academic, industry, NQTP partners and the Strategic Advisory Board from July to November 2022.

EPSRC is a key partner within the NQTP and shares the ambition to maintain the UK's reputation as an excellent place to do research. [Find out more about EPSRC's quantum technologies theme](#).

This funding opportunity is related to [EPSRCs strategic delivery plan 2022 to 2025](#) where quantum technologies is a priority area.

## About NQTP

The NQTP was established in 2014 to make the UK a global leader in the development and commercialisation of quantum technologies, which is set to transform the global society and economy. Find out more information about the [NQTP](#).

The UK Government has published the [National Quantum Strategy](#), which sets out a ten-year vision and plan for quantum in the UK, committing to spend £2.5 billion to research, innovation, skills and other activities in that period, as well as committing an additional £80 million over the next two years towards key activities.

This long-term commitment builds on the successful foundation laid by the National Quantum Technologies Programme and the UK sector.

## Supporting documents

[UKRI policies and standards](#)

[EPSRC policies and standards](#)

[Good research resource hub](#)

## Global Talent visa

Researchers associated with the Hubs are eligible for a [Global Talent visa](#) under the 'exceptional promise' category for future research leaders.

## **Annex 1: Additional Grant Conditions**

### **GAC 01 Fixed Start date**

Successful Hubs must start by date of 01 December 2024 and have a duration of 60 months. The Hub will have a fixed capital spend profile and standard recurrent spend profile issued by EPSRC.

### **GAC 02 Project Officer Appointment**

Further to RGC 7.4 Research Monitoring and Evaluation, this grant is expected to work alongside other grants funded via the National Quantum Technologies Programme and to comply with NQTP governance where appropriate. EPSRC will nominate a member of UKRI staff (The Project Officer) who will be your primary point of contact. The Project Officer will ensure that the project is being run in accordance with the terms and conditions and in line with financial due diligence.

The Project Officer(s) should have access to all documentation of Governance and Reporting bodies, in so far as it relates to the administration and application of the grant. As funding administrators, all UKRI staff have agreed to maintain the confidentiality required by all parties involved in EPSRC funded research.

### **GAC 03 Equality, Diversity, and Inclusion**

In addition to RGC 3.4 you are expected to prepare a full equality diversity and inclusion plan within the first three months of the life of the grant for the duration of this grant to demonstrate best practice in equality, diversity, and inclusion throughout the lifetime of this funding award. Confirmation that the plan is in place must be received by the project officer within 3 months of the grant start date and should be sent to: [quantumtechnologies@epsrc.ukri.org](mailto:quantumtechnologies@epsrc.ukri.org). The outputs will be assessed and monitored annually. The Equality, Diversity and Inclusion plan must be recorded through the grant reporting process.

### **GAC 04 Collaboration Agreements and User Engagement strategy**

You must develop and execute a strategy for engaging with potential users of the research funded in the project. This strategy should be reviewed and updated regularly as part of the formal management and reporting process agreed for this grant.

Notwithstanding RGC 12 Exploitation and Impact, effective collaborative agreements between both University and non-University partners and organisations must be in place within 3 months of the grants start date and regularly updated as applicable.

The agreement should detail:

- the process of any flexible allocation of resources throughout the project,
- accessibility and sharing of research outputs and outcomes,
- ownership of intellectual property and
- rights to exploitation for the benefit of the UK.

It is the responsibility of the Research Organisation to put such an agreement in place before the research begins. The Project Officer must be informed within three months of the start of the grant, that the collaboration agreement is in place and has been signed by all partners and/or the progress made (unless some alternative timeline has been agreed with EPSRC beforehand). If sufficient progress has not been made within three months of the start of the grant, EPSRC reserves the right to enact RGC 12.1. Confirmation that the agreement is in place must be sent to: [quantumtechnologies@epsrc.ukri.org](mailto:quantumtechnologies@epsrc.ukri.org).

Appropriate and effective collaboration agreements should be put in place between University and non-University Project Partners and collaborators at suitable points during the course of the grant.

Arrangements for collaboration and/or exploitation must not prevent the future progression of research and the dissemination of research outputs and outcomes in accordance with academic custom and practice, nor should they be in conflict with the Research Councils' terms and conditions.

### **GAC 05 Advisory Board Appointment**

This grant must establish and run an Independent Advisory Board, or equivalent body, to oversee the running of the project and provide advice on the strategic direction and activities of the project.

This Independent Advisory Board must meet at least twice a year. The terms of reference of this group or any committee should be agreed with the EPSRC and should have at least 50% independent membership and an independent Chair. The terms of reference and membership of the Advisory bodies of the QT Hubs must be approved by EPSRC UKRI. The Project Officer will also be expected to attend and participate in Advisory Board and other appropriate meetings for the duration of the grant. The Project Officer will be EPSRC's main contact with the project and must receive all Advisory Board meeting minutes. EPSRC reserve the right to attend any meetings.

### **GAC 06 Governance and Leadership Structure**

You should have established an appropriate governance, leadership, and management structure with clear lines of responsibility and authority to oversee the day-to-day running of the project. This should be in place within six months of the start date of the grant.



The terms of reference and management structure, including the leadership team membership must be approved by EPSRC in advance, as must any changes to this structure. Confirmation that the agreement is in place must be sent to: [quantumtechnologies@epsrc.ukri.org](mailto:quantumtechnologies@epsrc.ukri.org). The Project Officer will be EPSRC's main contact with the project and must receive all meeting minutes of the management committees. EPSRC reserve the right to attend any meetings.

## **GAC 07 Management Structure and Resourcing**

Adequate resourcing to support an appropriate management structure, as specified in the funding opportunity documentation, should be costed within the grant.

### **GAC 07a Leadership team and Support**

The Hub leadership team must include a Director and a PI. These will be supported by a 1 FTE in Communications manager, a 1 FTE Hub manager and a 1 FTE in Business development manager.

### **GAC 07b Staff Changes**

In addition to RGC 7.3, this award is made on condition that any requests to change the staff listed on the grant will require prior approval from EPSRC. We must be contacted in writing and prior approval sought before this change can be made. To facilitate any changes of this nature the case must be made for why any staff changes are required. Requests for such a change are to be submitted to EPSRC UKRI. We will then consider and inform You of their decision.

## **GAC 08 Monitoring and Reporting**

The Grant Holder must agree to comply with requests for additional financial or non-financial information outside of the stated reporting cycle. Regular monitoring will be conducted through the Project Officer, who will act on behalf of UKRI.

### **GAC 08a Reviewing**

In addition to the requirements set out in standard UKRI grant conditions RGC 7.4 Research Monitoring and Evaluation and 7.5 Disclosure and Inspection, We reserve the right to instigate a review of all or part of the grant at any stage during the lifetime of the award as well as after the grant has finished. We will give you due notice of the date of any review and will provide details of the Terms of Reference and documentation required. Any review will be conducted by an expert panel, which will make recommendations to us for the grant's future.

### **GAC 08b Reporting**

In addition to the requirements set out in the standard UKRI grant condition RGC 7.4 Research Monitoring and Evaluation, you are responsible for providing annual progress reports which include financial and non-financial performance metrics to the project officer. A detailed list of performance metrics and instructions for reporting will be agreed with the Grant Holder upon commencement of the grant. Mandatory annual reporting to EPSRC UKRI on Hub expenditure and progress against the Hub work plan, and EDI plan.

### **GAC 08c Sanctions**

In accordance with RGC 11 Sanctions, EPSRC reserves the right to suspend the grant and withhold further payments if the performance output metrics requested are not provided by the stated deadlines or determined to be of an unacceptable standard by the EPSRC Project Officer(s). The Research Organisation will be formally notified in writing if a suspension occurs. Any costs incurred during this period, irrespective of source, will be incurred at risk with subsequent EPSRC payments being withheld should any discrepancies remain unresolved.

### **GAC 08d Funding Assurance**

This grant will itself be subject to assurance reviews and the Director and Principal Investigator are required to fully co-operate in these reviews and provide UKRI with information relating to the grant and its project partners which are relevant to the assurance review in a timely manner.

### **GAC 09 Publicity and Branding**

In addition to RGC 12.4 Publication and Acknowledgement of Support, the Grant Holder must make reference to EPSRC UKRI and EPSRC UKRI funding and include the EPSRC UKRI logo and relevant branding on all online or printed materials (including press releases, posters, exhibition materials and other publications) related to activities funded by this grant. The grant holder must acknowledge the support received from the UK National Quantum Technologies Programme, including logos where appropriate.

In addition, each award must use the phrase 'UK Quantum Technology Hub' as part of its selected title. This phrase should also be included as part of any titles displayed on Hub logos used in printed, online, or presentational material.

### **GAC 10 Working with the NQTP**

The Director and members of the Hub leadership team are expected to take a leading role in national policy and debate in relation to quantum technology research, innovation, and exploitation. In this context, the director and leadership team are expected to support and contribute to our strategies and coordination as requested by us, and participate in the work of the UK NQTP as requested.