

User Engagement and Partnership Project Guidelines

NETWORKED QUANTUM INFORMATION
TECHNOLOGIES

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Networked
Quantum
Information
Technologies



Introduction to NQIT

The Networked Quantum Information Technologies (NQIT) Hub is part of the UK National Quantum Technology Programme, funded by the Engineering and Physical Sciences Research Council. The NQIT Consortium is an alliance of nine universities led by Oxford University, plus more than 30 commercial and government organisations comprising leading experts across a range of backgrounds from academia, industry and government agencies working together to achieve the ambitious goal of developing a universal quantum computer.

"NQIT leads the UK's efforts in quantum computing and simulation, achieving key milestones in the development of hardware and software that will deliver core capabilities in these disruptive technologies by harnessing expertise across the UK and partnerships across the world."

—Professor Ian Walmsley, Director, NQIT Hub, 2018

User Engagement

Aim

The aim of the NQIT User Engagement team is to ensure uptake of early spin-out technologies and to identify new opportunities for user-driven applications.

User Forum

We hold a User Forum every 6 months to facilitate dialogue between researchers and industrial/commercial users. This provides an opportunity for users to find out about our latest research and development. It also ensures that the researchers are fully aware of the users' requirements and expectations, and therefore, can align their research with industrial and commercial demands.

User and Partnership Projects

Introduction

NQIT has set aside substantial funding to support promising quantum technology projects that have early commercialization potential.

“This exciting new Quantum Hubs network will push the boundaries of knowledge and exploit new technologies, to the benefit of healthcare, communications and security.”

— *Greg Clark, Minister of State for Universities, Science and Cities, EPSRC Press Release, Nov 2014*

User and Partnership Projects

We have divided our Partnership Resource funding scheme into two categories:

- User Projects
- Partnership Projects

User Projects are those which have immediate applications, while Partnership Projects are those with a longer technology maturity timeline but with substantial industrial interest.

About New Projects

The objective of Partnership Resource funding is to help accelerate technology development and commercialisation progress for NQIT. User and Partnership Projects ensure that promising new projects, originating in research or from our users, are investigated and, if appropriate, developed rapidly.

Eligibility

1. The aims of User/Partnership projects must be aligned with those of the Hub.
2. Partnerships must be formed with a Hub work package leader. Applicants may suggest a suitable work package leader and final assignment will be made by the User Engagement Team. Assignment does not need to take place at the initial application, but must happen before stage 2 of the application process.
3. Each project proposal must involve new project partners.
4. Projects must demonstrate significant industrial relevance.

Key Facts for User/Partnership Projects

1. Typical project length: 4 months to 18 months.
2. Typical Funding: £25k - £125k.
3. **Eligible topics:** Any project that:
 - a. helps speed up the specified NQIT deliverables
 - b. uses NQIT scientists with commercial partners to advance quantum technology.
4. **Industrial Contribution:** Contribution in kind required.
5. **Expected outcome:** Establishment of the market potential or technical feasibility of the concept proposed, field testing, prototyping, miniaturisation, integration, scale-up potential, performance verification.
6. The scheme operates on rolling deadlines.
7. Projects must be collaborative and include one current NQIT academic researcher.

Application Procedure

1. (Stage 1) An application is submitted to the Co-Director (User Engagement) who assigns a Technical Associate as the Project Manager.
2. The Co-Director (User Engagement) informs the Senior Leadership Team typically within a week.
3. (Stage 2) If the Senior Leadership Team is interested at the project at this stage, then the Project Manager with input from, if needed, other hub members, project partners or external sources, prepares a full project proposal indicating timescale, costs, benefits and any risks in the proposed project.
4. The Senior Leadership Team reviews the project proposal. They may choose to send it to the Management Board for comments.
5. The Senior Leadership Team makes a decision on project approval or rejection. If approved, the project will be scheduled in by the Co-Director (System Engineering) who will discuss with the work package leaders to ensure that resources are available and allocated.
6. During the course of the project, the Project Manager will be responsible for monitoring progress and reporting to Co-Director (User Engagement) any deviation from the approved plan.
7. Results will be summarised to Management Board and next User Forum

User Projects require *at least one industrial partner*. The project can originate from any Hub member, market research, project partner or elsewhere.

Partnership Projects may be technology extensions, or investigations with significant industrial interest, without necessarily having an immediate application. Projects must be collaborative. *Project proposed from outside NQIT must have at least one industrial partner as well as an identified current NQIT academic researcher.*

Application Form

Project Title	
Academic Applicant Names and Affiliations	
Industrial Applicant Names and Affiliations	
Type of Project	<input type="checkbox"/> User Project <input type="checkbox"/> Partnership Project
Size of Project	<input type="checkbox"/> Small (Up to £25k) <input type="checkbox"/> Large (up to £125k)
Scope of Project	<input type="checkbox"/> Establishment of the market potential <input type="checkbox"/> technical feasibility <input type="checkbox"/> field testing <input type="checkbox"/> prototyping <input type="checkbox"/> miniaturisation <input type="checkbox"/> integration <input type="checkbox"/> scale-up potential <input type="checkbox"/> performance verification <input type="checkbox"/> Other (Please state) <hr/>
Potential interested members within NQIT identified?	<input type="checkbox"/> Yes (please state the group/work package) <hr/> <input type="checkbox"/> No (They will be assigned at stage 2)

In addition, please supply a summary of your proposed project (maximum 6 pages, font Calibri, size 11) addressing the points below and on page 5.

General Questions:

1. Project Summary (max 200 words)
2. Current intellectual property status on proposed project

Business Related Questions:

3. What is the business opportunity and the size of the market opportunity that this project might open up? Over what time scale? (max 300 words)

Technical Questions:

4. What is innovative about the project? (max 300 words)
5. How can this project help with the NQIT Hub deliverables? (max 400 words)
6. List out the project's deliverables

Management Questions:

7. What are the risks (technical and commercial) to the project's success? Please state your risk management strategy (max 200 words)
8. Does the consortium have access to facilities to deliver the outcomes? Please also comment on:
 - a. The industrial partner's capabilities for performing the subsequent product development
 - b. Involvement of an end-user partner (max 300 words)

Financial Commitments:

9. What financial commitment from NQIT is required for the project? Please justify (max 300 words)
 - a. Show cost for each deliverable
 - b. How are the figures calculated?
10. List the industrial partners for this project. Please comment on the industrial interests in your work. Include their commitment in terms of cash, staff time, materials, capital equipment loan or anything else. (max 300 words)

Please submit the application form to: engage@nqit.ox.ac.uk

Contact Us

For User Project/Partnership Project applications and enquiries, please contact the User Engagement Team:

engage@nqit.ox.ac.uk

For more information, please visit our website:

www.nqit.ox.ac.uk

