



Guidelines re: submission of proposals for funding through Partnership Resource

In no more than 2 x A4 pages, please provide information about the development under the following headings:

1. Summary - of the idea, including its novelty
2. Deliverables - outcomes and outputs
3. Participants, public and private sector - and their roles
4. Overall costs – including cash / in-kind contributions from partners
5. How much funding would be required from the Hub?
6. Duration of development, including proposed start-date

Note: Partnership Resource is for revenue expenditure only –staff, travel, consumables etc. but not for capital.

Suggestions will be considered under the following criteria:

Identifiable contribution to:

- Capability – adding new capability or significantly enhancing existing provision
- Strategy – strategic fit with the Hub’s aims and objectives (appended)
- Scale – on a big enough scale to have an impact
- Partnership – bringing in new partners, or significant enhancement of existing ones
- Commercialisation
- Measurable deliverables and realistic timelines
- Realistic costs with appropriate contributions from partners

Proposals should be emailed to georgia.mortzou@york.ac.uk

Appendices

1. EPSRC Guidelines for Partnership Resource - Summarised

Additional funding designed to:

- Support evolution of the Hubs
- Bring in new capabilities that are key to Hub success
- Fund engagement with partners outside the initial scope of the Hub
- Respond to new opportunities developed by the QT programme – Hubs and stake-holders
- Involve new research partners
- Support activities on a significant scale
- Encourage collaboration between Hubs required to support activity with greater impact
- Support a high level of user-engagement – e.g.
 - Sandpits or workshops to encourage new collaborations
 - Working with new academic or strategic partners
 - Pump-priming activities
 - Networking activities
 - Support for responsible innovation, including appropriate public engagement activities

2. Hub Aims and Objectives - Summarised

- Development of new quantum communications technologies that will –
 - overcome current limitations
 - reach new markets, enabling widespread use and adoption
 - enable operation of a viable business model and thus commercialisation (through tech transfer to existing companies, or through start-ups)

- Technology development and demonstration in four specific technical areas:
 1. Short range, free-space, quantum key distribution (QKD) technologies, enabling many-to-one communications for consumer, commercial and defence markets;
 2. Chip-scale QKD technology, to address cost and manufacturability issues and enable future widespread deployment and application of QKD;
 3. Quantum communication networking, facilitating device and system trials, integration of quantum and conventional communications, and demonstrations for stakeholders, customers and the wider public;
 4. Next-generation QComm technologies - beyond simple secure key distribution. Development of laboratory experiments on quantum digital signatures, quantum repeaters and new approaches to QKD immune to source and measurement vulnerabilities, with the objective of demonstrating these on our networks.

- Support of the technologies across all four technical areas with the necessary theory, modelling and detailed security analysis of our systems, both at the physical and protocol levels.

- Flexibility, adjusting our suite of technology themes according to R&D progress and feedback from engagement with stakeholders, partners and the wider public.

- Collaboration with new R&D and commercial partners, utilising ‘Partnership Resource’.