# Call for Proposals – UK QT Hub Sensors and Timing

# Call Document 3: New Collaborations with Industry

## Published 5th November 2021. Stage 1 submission deadline: 5pm, 31st January 2022. Stage 2 submission deadline to be advised.

### Introduction:

The UK National Quantum Technology Hub for Sensors and Timing is the UK National Centre of excellence for the development and commercialisation of quantum sensors and timing devices. The QT Hub Sensors and Timing's mission is to translate state-of-the-art lab technology into deployable practical devices. Collaboration is at the heart of what we do, with academics and leading companies working together to translate research into marketable applications. We are an international centre of excellence bringing together world-leading physicists, engineers, industry and end-users. To continue to support our mission we have had a Partnership Resource Fund (PRF) of £2M which is being used to foster a coherent program and the adoption of quantum sensing and timing technologies with industry.

Under this Call 3, approximately £200,000 of the PRF will be used to fund partners in academia who have new, or significantly enhanced, collaborations with industry, to open up new pathways for academia to have impact with industry partners, in new sectors and on the strategic route to new applications of the technologies developed within the QT Hub. This will most likely be the last allocation of funding under this scheme for projects exceeding £10,000.

Due to the comparatively small size of the funding pot, and the anticipated level of interest in the call, there will be a two-stage application process.

### Scope of the New Collaborations with Industry Scheme:

This part of the PRF is reserved to fund academics initialising and delivering user-driven, engineering-led research and demonstration activities. This will build commercial confidence to unlock additional industrial investment to promote follow-on projects funded by UKRI, Dstl or directly by industry as a route to impact.

Eligible proposals will fit within the following area targeted for support:

- Demonstrations in conjunction with instruments developed within QT Hub Sensors and Timing. These should include end-users and/or benchmark against other sensing technologies. Proposals should demonstrate added value beyond the demonstrations originally within the Hub.
- Work to identify, prioritise and overcome the causes of significant limitations on the use of quantum sensor devices or systems outside of a traditional lab environment including on moving platforms.

As with all activities in QT Hub Sensors and Timing, activities supported via the PRF must be performed in line with the principles of Responsible Research and Innovation (RRI).

The programme will accept proposals led by any eligible UK academic institution (EPSRC eligibility criteria).

## Funding:

Proposals will be funded at 80% of academic costs. Capital items are not eligible costs. Any non-academic partners are not eligible for any funding. The total funding pot associated with this Call for Proposals is ~£200,000. Projects will have a duration of up to 18 months and, following award and contract negotiation, will deliver the completed results before November 2024.

## Submission Procedure:

Proposals may be submitted at any time prior to the deadline. Prior to submission applicants are strongly encouraged to contact the QT Hub Sensors and Timing PI, Professor Kai Bongs, to discuss the suitability of their proposal.

The maximum length of a first stage proposal will be 1 page and must be submitted to Jo Smart via email at J.C.Smart@bham.ac.uk. Proposals must address the following sections:

- *Concept, objectives and dated deliverables*
- *Alignment to the call scope*
- *Potential Impacts and Pathways to Impact*
- *Consortium, including unfunded collaborators*
- *Budget outline, stating 100% project costs.*

If successful at the first stage, a second stage proposal will be requested. The maximum length of a second stage proposal will be 4 pages and must be submitted to Jo Smart via email at J.C.Smart@bham.ac.uk. Second stage proposals must address the following sections:

- *Concept and objectives*
- *Alignment to the call*
- *Work Programme, including dated deliverables*
- *Potential Impacts and Pathways to Impact*
- *Proposed arising intellectual property use and ownership arrangements*
- *Consortium and Resources*
- *Budget justification and requested funding*

Each second stage proposal should include signed statements of support from industry stating their cash and/or in-kind commitments (these are additional to the page limit).

## Evaluation criteria:

Proposals will initially be evaluated against the following criteria:

- alignment to the scope of the call
- collaboration is with either: an industrial organisation that has not previously collaborated with the applicants, or; the proposal is for a significantly enhanced level of collaboration with an industrial organisation. Industry support should be demonstrated through indirect cash contribution and/or in-kind support (direct cash contribution will be considered with high favour)
- quality of consortium and implementation strategy

- potential impact and ability to realise the impact (clear vision and strategy for working with industry, including understanding of the industry / user drivers)
- value for money

## Evaluation procedure:

Proposals will be evaluated by a selection of the PRF panel at panel meetings, or a remote-meeting equivalent, following the general EPSRC peer review principles: EPSRC Assessment Principles. Proposals will be circulated to panel members selected for their expertise by the Chair of the Application and Technology Exploitation Panel. The proposals will also be circulated to the QT Hub Sensors and Timing PI and Director. The panel will discuss the proposals with consideration of the evaluation criteria and provide the ATEP Chair with their advice, taking a portfolio approach and with specific consideration of value for money. The ATEP Chair, QT Hub Sensors and Timing PI and Director will vote and award funding with consideration of the advice and available budget. A majority decision will be acceptable if consensus can't be reached. The PI will have the casting vote, if needed.

Proposals will be evaluated in a fair and transparent way. Confidentiality will be assured through following standard EPSRC procedures. The panel will follow the EPSRC standard procedures for avoiding conflicts of interest: EPSRC Conflict of Interest procedures . All reviews will be independent and objective. The panel will seek to avoid selecting reviewers where a conflict of interest is identified, such as:

- anyone with an identified personal or organisational association with the project to be assessed
- anyone with an identified personal association with any other proposal in direct competition for funding.

Anyone asked to provide a review will check to ensure that there is no reason why they should not do so, and should decline the request citing 'conflict of interest' as their reason if they feel there to be a concern.

Applicants will receive feedback on their proposal and be invited to reply to reviews.