Connected Everything II:
Accelerating Digital Manufacturing Research Collaboration and Innovation

Feasibility Studies – Fourth Call for Proposals

Closing date: 9 November 2022 at 5pm

Background

As digital technology advances, the manufacturing sector must adapt and respond to a great number of drivers and barriers. Key to addressing these challenges will be a strongly cross-disciplinary approach, facilitated through our Connected Everything network of academics and industry partners. In order to harness the potential from these challenges, the changes in human skills, capabilities and working environments need to be considered, alongside the development and change in business models that underpin industry and innovation.

Since its inception in 2015, the Connected Everything network has over 500 members, has supported 20 feasibility studies, 4 summer schools and 14 placements, has held a series of national specialist conferences and events and played a leading role in informing the research challenges incorporated into the 'Made Smarter' Wave 3 bid to the Industrial Strategy Challenge Fund.

CEII will continue to expand our multidisciplinary community of researchers and industrialists from a range of disciplines to address key challenges associated with the future of digital manufacturing. We will be collaborative, multidisciplinary and inclusive in our approach to knowledge creation, knowledge transfer, new collaborations and strategic influence to achieve demonstrable impact on people, society and the economy.

Feasibility study funding call

CEII is looking to fund a round of feasibility studies with **a specific focus on industry involvement which reflects one or more of our 7 themes.** Our total funding available for this call is £300,000 and we want to fund as many high-quality applications as possible. Projects will be funded to a maximum value of £60,000 at full Economic Cost (fEC). Funding will be awarded at 80% fEC (total project value cannot exceed £60,000). Projects can be between 6 and 12 months in length and must complete before the end of October 2023. Applications where a portion of the £60,000 costs is met by industry funding are also welcomed.

As CEII is funded by EPSRC, our focus is on fundamental ideas that have potential to be developed into future applications or concepts that can be implemented within Digital Manufacturing. Therefore, proposals should address challenges at low Technology Readiness Levels (TRLs 1-3) and be aligned with at least one of the thematic areas.

All proposals submitted must be able to conduct and complete their research while adhering to government guidance relating to the ongoing pandemic.

What is the aim of the funding?

The aim of the feasibility studies is to enable cross-disciplinary, foresight, speculative and risky early-stage research. We are looking at funding pre-Responsive Mode proposals. Applications led by early career academics/researchers are particularly encouraged, and projects will also be expected to ensure that their research involves explicit collaboration with industry partner(s), providing direct or in-kind support. We are keen to support collaborations of all sorts that would otherwise not happen, and welcome applications with leading participation from people drawn from non-traditional manufacturing disciplines. The feasibility study should result in increased confidence in the proof of concept developed, which then has potential to attract further investment.

Details of the 20 projects funded through CE can be could at:
https://connectedeverything.ac.uk/activities/feasibility-studies/

Equality, Diversity and Inclusion (EDI)

CEII is committed to Equality, Diversity and Inclusion. We particularly welcome applications from teams which are diverse in terms of protected characteristics and disciplinary areas. Connected Everything knows that diverse teams deliver high quality research outcomes. Furthermore, Equality, Diversity and Inclusion approaches lead to happy and healthy research teams. CEII wants to encourage, support and respect ideas from everyone and ensure our inclusive activities are representative of our network's community. You can read more about our EDI principles on our website.

Upon receipt of a proposal we will ask the PI to (voluntarily) complete an anonymous EDI monitoring form for their team so we can learn how we can support increasing diversity in our activities.

We particularly recognise the impact of engaging with activities such as networks and are keen to challenge our own thinking as we deliver our programme. Therefore, we encourage applicants to discuss any specific requirements that will enable participation with the CEII team.

We have designed our funding allocation process with an aim to minimise any potential impact of bias at all stages of decision making. The application form will be in two parts: Part 1 will contain contact details, project team and track record information and Part 2 will be the outline Case for Support, which will be considered anonymously by expert reviewers and a shortlisting panel. Please make every effort to ensure that **no identifying content is included in Part 2** (e.g. host institution). This will enable proposals to be considered without members of the panel having knowledge of the applicant's identity or affiliations.

Responsible Innovation

Responsible Innovation is a process that seeks to promote creativity and opportunities for science and innovation that are socially desirable and undertaken in the public interest. Responsible Innovation acknowledges that innovation can raise questions and dilemmas, is often ambiguous in terms of purposes and motivations and unpredictable in terms of impacts, beneficial or otherwise. CEII want to ensure that any research it funds is undertaken with the values of Responsible Innovation in mind. In this case, we expect researchers involved in funded feasibility studies to 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.

Application Process

Awards will be made via a short written application, and if selected, followed up by a pitch to a multidisciplinary panel including representatives from industry. Each feasibility study will be expected to deliver a discipline-bridging state-of-the-art review, early stage concept development, or demonstrator technology, focussed on highlighting the transferability of technology concepts from other domains to manufacturing and industry.

Successful applicants will be expected to participate in network events and will be required to present project updates at the Connected Everything events. In addition, there is a requirement that presentations on the successful projects are made at a kickoff meeting to be held online. One of the most valuable outcomes of our first cohort of feasibility studies was the informal network of researchers that emerged, and we expect our feasibility study teams to form a core part of the CEII community.

Selection criteria

The following criteria will be used by the review panel when assessing the proposals:

- Multidisciplinary and clear demonstration of "discipline-bridging" through activity;
- Involvement of industry stakeholders;
- Involvement of early career researchers;
- Potential for development of future funding applications from EPSRC (e.g. responsive mode), Innovate UK or other funding streams;
- Demonstration of transfer of concepts from other domains to manufacturing;
- Potential to lead to strong dissemination materials;
- Paths to accelerate impact of research to ensure rapid transfer to industry.

Key dates

Sept /Oct 2022	Call for proposals goes live
12 October 2022	Feasibility Study call - Question and Answer session (online). To book your place go to eventbrite
9 November 2022	Deadline for submissions (5PM)
w/c 28 November 2022	Invitations to Panel Pitch Day issued Unsuccessful proposals advised
16 December 2022	Panel Pitches (online)
w/c 19 December 2022	Successful proposals announced
12 January 2023	Kick off meeting (online)
January 2023	Feasibility studies begin

All feasibility studies must be completed by October 2023

Funded by:

Eligibility

Guidelines on eligibility can be found here. Eligible organisations include all UK Higher Education Institutions that receive grant funding from one of the UK higher education funding bodies, along with research institutes for which the Research Councils have established a long-term involvement as a major funder. Other independent research organisations (IROs) may also be eligible and a list of such organisations is available here.

What can the funding be used for?

The budget outline for the proposed feasibility studies can include investigator/ researcher time, travel and subsistence appropriate to delivery of the project, and consumables.

As the grant holder, the University of Nottingham is responsible for allocating funding to successful proposals and will reimburse subcontracting organisations at 80% full economic costing. Academic institutions will be required to itemise bills based on 100% FEC and then invoice at 80% FEC.

Submitting proposals

Feasibility study applications should be submitted, using the application form provided, via email to laura.brian@nottingham.ac.uk by 5pm on Monday 9 November 2022.

As you will see form the application form, proposals for feasibility studies should include the following content:

Part One

- Project Title
- Lead organisation
- Principle Investigator
- Details of the project team, including industry partners. Please indicate which members of the academic team are early career researchers.

Part Two

- Start date and duration.
- Context, aims and objectives, and benefits of the proposed work.
- A statement of the novelty of the proposed work.
- An outline project plan
- What are the tangible deliverables of the feasibility study?
- How could further funding in this area be obtained?

References can be included as an appendix and not counted in the page count. Please complete the whole form in Arial 11.

Part Three

A breakdown of the allocation of the funds with a short justification for each category is also required. The categories are:

- o Directly Allocated
- o Directly Incurred
- o Indirect Costs

All application form templates can be downloaded at: https://connectedeverything.ac.uk/feasibility-studies/ceii-call-for-feasibility-study-proposals/

Additional Information

In addition to the specific outputs outlined in your proposal, each feasibility study project team is required to:

1.   Attend a kickoff meeting on 12 January 2023

2.   Present your work (in progress or completed) to the Connected Everything members at events arranged by the network. You will need to include travel expenses in your budget if it is held in-person.

3.   Provide information and updates for the dedicated project webpage on the Connected Everything website, when requested. Connected Everything will also promote its work across the sector, and occasionally project leads might be asked for short quotes or other information to demonstrate the activities that are taking place.

4.   Work with the Connected Everything Knowledge Exchange and Research Lead to produce an information sheet and detailed case study, templates for which will be provided.

5.   Ensure that the work is acknowledged as being supported by EPSRC and Connected Everything when promoting projects, either through articles, papers, presentations or interviews. Both EPSRC and Connected Everything branding should be visibly included on any presentations.

Mentoring

Each project will be provided with access to a mentor who will support the activities of the project. Your mentor will provide advice and feedback to you at appropriate times during your project activities. The aim is to provide your project with an additional level of support and guidance, rather than monitor its progress. Mentors may be asked to provide feedback to the Connected Everything II Executive Group from time to time.

Further Information

If you have any questions regarding this call for proposals, please contact the Connected Everything Network Feasibility Study Manager, Laura Brian at email: laura.brian@nottingham.ac.uk

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