



Engineering and
Physical Sciences
Research Council

Quick Reference

Please note that you must read the full Call document for guidance before submitting your proposal

Responsive Manufacturing

Call type: Invitation for outlines

Closing date: 11 August 2020 at 16:00

Funding Available: EPSRC will provide up to £7 million (Research Council Contribution) to support a number of research projects.

How to apply: Outlines followed by invited Full proposals.

Assessment Process: Outlines will be considered by an expert panel. Successful applicants at the Outline stage will be invited to submit a full proposal, which will undergo postal peer review, followed by assessment at a prioritisation panel, resulting in a rank ordered list.

Key Dates:

Activity	Date
Outline Call Open	15 June 2020
Deadline for Outlines	11 August 2020 at 16:00
Call Opens for Invited Full Proposals	17 September 2020
Deadline for Full Proposals	12 November 2020
Prioritisation Panel	February 2021
Funding decision	March 2021
Grant start date (earliest)	From April 2021

Additional information: Any applicant intending to apply to this call must submit an Outline via Je-S by 11 August 2020.

Contacts:

- Ms Stephanie Williams, Portfolio Manager, Manufacturing the Future Theme – Stephanie.Williams@epsrc.ukri.org.
- Mr Tochukwu Ajare, Portfolio Manager, Manufacturing the Future Theme, Tochukwu.Ajare@epsrc.ukri.org
- ManufacturingPeerReview@epsrc.ukri.org (Manufacturing the Future Theme central email inbox)
- Je-S Helpdesk - JeSHelp@je-s.ukri.org



**Engineering and
Physical Sciences
Research Council**

Responsive Manufacturing

Call type: Invitation for outlines

Closing date: Closing date: 11 August 2020

Related themes: **Digital economy, Energy, Engineering, Healthcare technologies, ICT, Manufacturing the future, Mathematical sciences, Physical sciences**

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Summary

The EPSRC Manufacturing the Future Theme will provide up to £7M (Research Council contribution) to support a portfolio of Responsive Manufacturing research projects.

Applicants intending to apply to this call must submit an Outline Proposal via Je-S by 11 August 2020. Outlines will be considered by an expert panel. Successful applicants at the Outline stage will be invited to submit a full proposal. This will undergo postal peer review, followed by assessment at a prioritisation panel, resulting in a rank ordered list. Funding decisions will be made in March 2021.

Proposals should target any current or future manufacturing system that is able to respond autonomously to emergent changes or disruption inside or outside the system and so contribute to its resilience and/or sustainability. Relevant changes

could concern, for example: supply chain disruption or feedstock availability; workforce availability; output requirements such as product specifications; or uncertainty or error in one part of the manufacturing system. The main research focus must be **within** the factory or equivalent manufacturing setting; however, the responsive system may respond to changes inside or outside the factory.

Proposals must lie within the remit of the EPSRC Manufacturing the Future theme. Proposals deemed by EPSRC to lie outside this remit or the scope of the call may be rejected without reference to peer review. This applies to both Outline Proposals and Full Proposals.

Applicants must meet standard EPSRC eligibility criteria (see Eligibility section).

Applicants who are invited to submit a full proposal will be required to include a User Engagement Strategy as part of the full proposal paperwork.

Background

The EPSRC Manufacturing the Future Theme (MtF) has recently refreshed its research priorities, with input from numerous members of the Manufacturing research and innovation community. The topic of 'Responsive Manufacturing' has emerged as one of the Theme's new research priorities.

In 2018 MtF held a strategic retreat (entitled 'Manufacturing Futures'¹) that explored the future manufacturing research (and innovation) space, supporting the development of new research (and innovation) themes that might form the basis for future EPSRC activities. A number of the themes which emerged were further explored and developed at the MtF Regional Meetings² in 2018 and 2019 with a range of manufacturing researchers. Further input into the Strategy Refresh was sought at a Research Priorities Workshop in October 2019³.

The emerging topics were subsequently refined, with significant input from the MtF Strategic Advisory Team (SAT), and from the MtF Early Career Forum.

One topic to emerge from the original Retreat was 'Disruption Resilient Manufacturing'. This captured the idea of a future manufacturing system that could learn from disruption, and could repair and reconfigure itself, eventually finding a new balance point for optimal operation. Such a system would be trusted to cope with disruption to infrastructure or resources, and could even use disruption to find an improved way of operating.

'Invisible Manufacturing' was another topic from the 2018 Retreat. The 'Invisible' system would self-optimize to provide a user-specified product, while the mechanisms behind the optimization were 'invisible' to the user. As well as ensuring production of the right products at the right time, place, cost and quality, this future system could self-optimize for different input materials,

¹ Report at <https://epsrc.ukri.org/files/newsevents/manufacturing-futures-retreat-2018-report/>

² Report at <https://epsrc.ukri.org/newsevents/pubs/mtfregionalmeetingsreport201819/>

³ Report at <https://epsrc.ukri.org/files/newsevents/report-of-the-manufacturing-the-future-research-priorities-workshop/>

supporting waste reduction, and also self-optimize with respect to other sustainability criteria.

Subsequent discussions with the MtF Strategic Advisory Team (SAT) have drawn out themes from the above starting points, along with ideas from other topics, to form the Responsive Manufacturing Priority which is the subject of this call.

Most recently, the global crisis arising from COVID-19 has brought attention to the impacts of supply chain and workforce-related disruption on manufacturing systems, and highlighted the need for resilient manufacturing systems that can respond to disrupted operating environments.

As part of the MtF Strategy refresh, the theme has adopted Sustainability as a cross cutting priority which should be reflected in all strategic investments. Additionally, in May 2020 UKRI launched its first environmental sustainability strategy, setting out its ambition to achieve 'net-zero' for our carbon emissions. By 2025, environmental sustainability will have been embedded across all our investment decisions.

Building on the above thinking, the aims of this Responsive Manufacturing call are to:

- Support the novel research required to enable responsive manufacturing: processes that self-adjust and self-optimize in real time
- Support research into responsive manufacturing processes with improved efficiency and optimized resource, asset use and interoperability, leading to more sustainable manufacturing systems.
- Develop responsive manufacturing technologies and processes (and/or combinations of technologies and processes) which will enable and form part of resilient manufacturing systems.

For more information about EPSRC's portfolio and strategies, see our website: <https://epsrc.ukri.org/research/ourportfolio/>.

Funding available

The EPSRC Manufacturing the Future Theme will provide up to £7M (Research Council contribution) to support a portfolio of Responsive Manufacturing projects, expected to be up to three years in duration. Grant size is expected to be in line with usual Standard Research grants. Applicants intending to request a particularly large grant (>£2.5 million) are strongly advised to contact EPSRC in advance of submission to discuss this.

Inclusion of Project Partners is encouraged, although not a formal requirement of this call. All applicants are however encouraged to think more broadly about industrial engagement, including building in plans to engage with a range of relevant manufacturing companies, including SMEs, throughout the project. A User Engagement Strategy describing this approach will be submitted as part of the Full Proposal stage, and the appropriateness of this will be assessed under the Applicant and Partnerships criterion.

Research Scope

Proposals should target any current or future manufacturing system that is able to respond autonomously to emergent changes or disruption inside or outside the system and so contribute to its resilience and/or sustainability. Relevant changes could concern, for example: supply chain disruption or feedstock availability; workforce availability; changes in output requirements such as product specifications; or uncertainty or error in one part of the manufacturing system. The main research focus must be **within** the factory or equivalent manufacturing setting; however, the responsive system may respond to changes inside or outside the factory.

To define the core research challenges to be supported by this call, it may be useful to consider the responsive system's capabilities as analogous to those of an organism. The organism's responsiveness is enabled by a nervous system which senses change and conveys information to the brain. The brain receives the information and decides on a response. The response is then communicated to the muscles or organs, which act to respond to the change. By analogy, the development of a particular responsive manufacturing system might require a 'nervous system' of in-line sensors and measurement technology to provide real-time information to the 'brain', which might rely on protocols to support autonomous control. The 'muscles' of the system might include manufacturing technologies which have a modular design, or can handle different materials concurrently.

The focus of the research should be on technologies and processes which would form part of a Responsive Manufacturing system, and/or on the design or operation of such a system. In either case, it must be clear how the research to be conducted supports the vision of a Responsive Manufacturing system, and that consideration has been given to broader systems issues and challenges relating to the research and its impact. To fit within the remit of the EPSRC Manufacturing the Future theme, proposals must focus on fundamental research into the manufacturing technologies, the manufacturing process and/or its design and operation.

Sustainability considerations should be embedded in all projects. The research projects should be compatible with, or help to achieve, manufacturing technologies, processes and systems that make effective and efficient use of resources, leading to acceptable (even positive) environmental impacts.

A number of broader challenges may also arise when considering the development of responsive manufacturing systems. Research focused mainly on addressing the challenges below may fall outside the remit of the EPSRC Manufacturing the Future theme and is outside the scope of this call. However, applicants are encouraged to consider any broader challenges relevant to their project and to demonstrate in their application that their research vision supports these considerations. Where appropriate, a minor part of the research project may focus on one or more of these broader issues. These include, but are not limited to:

- Digital modelling of processes
- Standards, Regulation and Ethics relating to responsive manufacturing processes, for example where variable feedstocks are used.

- Privacy, trust and security concerns, as well as data handling, for example relating to traceability of products
- The role of human intervention and creativity in a responsive process
- Understanding of manufacturing supply networks
- Business models and management systems for responsive systems
- Sustainability credentials of products made by the responsive process, for example, Life Cycle Analysis of products
- Product design.

Equality, Diversity and Inclusion

The long-term strength of the UK research base depends on harnessing all the available talent. EPSRC expects that equality and diversity is embedded at all levels and in all aspects of research practice and funding policy. We are committed to supporting the research community, offering a range of flexible options which allow applicants to design a package that fits their research goals, career and personal circumstances. This includes career breaks, support for people with caring responsibilities, flexible working and alternative working patterns. With this in mind, we welcome applications from academics who job share, have a part-time contract, or need flexible working arrangements.

Peer review is central to EPSRC funding decisions, we require expert advice and robust decision-making processes for all EPSRC funding initiatives. We are committed to ensuring that fairness is fully reflected in all our funding processes by advancing policy which supports equality, diversity and inclusion. Please see our Equality and Diversity webpages

<https://epsrc.ukri.org/funding/equalitydiversity/> for further information.

Responsible Innovation

EPSRC is fully committed to develop and promote responsible innovation. Research has the ability to not only produce understanding, knowledge and value, but also unintended consequences, questions, ethical dilemmas and, at times, unexpected social transformations. We recognise that we have a duty of care to promote approaches to responsible innovation that will initiate ongoing reflection about the potential ethical and societal implications of the research that we sponsor and to encourage our research community to do likewise.

Responsible innovation creates spaces and processes to explore innovation and its consequences in an open, inclusive and timely way, going beyond consideration of ethics, public engagement, risk and regulation. Innovation is a collective responsibility, where funders, researchers, interested and affected parties, including the public, all have an important role to play. Applicants are expected to work within the EPSRC Framework for Responsible Innovation given on the EPSRC website (<https://epsrc.ukri.org/research/framework/>).

Guidance on Journal-based metrics

As part of our commitment to support the recommendations and principles set out by the San Francisco Declaration on Research Assessment (DORA; <https://sfdora.org/read/>), UKRI reviewers and panel members are advised not to use journal-based metrics, such as journal impact factors, as a surrogate measure of the quality of individual research articles, to assess an investigator's contributions, or to make funding decisions.

The content of a paper is more important than publication metrics, or the identity of the journal, in which it was published, especially for early-stage researchers. Reviewers and panel members are encouraged to consider the value and impact of all research outputs (including datasets, software, inventions, patents, preprints, other commercial activities, etc.) in addition to research publications. We advise our peer reviewers and panel members to consider a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice.

Equipment

Equipment over £10,000 in value (inc. VAT) is not available through this call. Smaller items of equipment (individually under £10,000) should be in the Directly Incurred - Other Costs heading.

For more information on equipment funding, please see: <https://epsrc.ukri.org/research/facilities/equipment/>.

Eligibility

Please ensure sufficient time to create Je-S accounts for Investigators who do not currently have one.

For information on the eligibility of organisations and individuals to receive EPSRC funding, see the EPSRC Funding Guide: <https://epsrc.ukri.org/funding/applicationprocess/fundingguide/>.

A list of eligible organisations is provided at: <https://www.ukri.org/funding/how-to-apply/eligibility/>.

How to apply

This is a two-stage application process: outline stage, followed by full proposals invited from those who are successful at the outline stage.

1. Submitting an outline application

You should prepare and submit your Outline proposal using the Research Councils' Joint electronic Submission (Je-S) System (<https://je-s.rcuk.ac.uk/>).

Although proposals may be multi-institutional, only one application form should be submitted for each bid. **Joint proposals on separate Je-S forms will not be accepted.**

When adding a new proposal, you should select:

- Council 'EPSRC'
- Document type 'Outline Proposal'
- Scheme 'Outline'
- On the Project Details page you should select the 'Responsive Manufacturing Outlines' call.

Note that clicking 'submit document' on your proposal form in Je-S initially submits the proposal to your host organisation's administration, not to EPSRC. Please allow sufficient time for your organisation's submission process between submitting your proposal to them and the call closing date. EPSRC must receive your application by **16:00 on 11 August 2020**.

Guidance on the types of support that may be sought and advice on the completion of the research proposal forms are given on the EPSRC website (<https://epsrc.ukri.org/funding/applicationprocess/>) which should be consulted when preparing all proposals.

Guidance on writing an application

Your outline proposal should consist of the application form and a 4-page case for support. We will not accept any other documents such as annexes, a work plan attachment or letters of support.

Costs on the application form should be recorded as accurately as possible within reason. We do not expect any quotations at this stage, but the overall cost of applications submitted in the next stage should be within 10% of the cost proposed at this stage.

The 4-page case for support should include the following information (please structure it using the headings given):

Research Vision

- What is your vision of the Responsive Manufacturing System addressed by your project, and how does your proposed research contribute to this vision?

Research Challenge

- Identify the overall aims of the programme and the challenges to be addressed.
- Explain why the proposed research is novel, timely and innovative.
- Explain how the proposed research fits the call.

Project team

- Briefly explain who will be involved in the grant and what expertise they will contribute.

Proposed Programme

- Describe the programme of research that will be carried out through the grant, showing how the work packages relate to each other. A small diagram may be useful at this point.
- Outline the methodology to be used in the research and justify this choice.

At the outline stage, proposals will be assessed against their fit to the scope of the call. Therefore, you should be sure to justify how your project would contribute to the development of manufacturing technologies or processes which work in a responsive way. We strongly advise applicants to refer to the assessment criteria in the next section when writing a proposal.

Please note that on submission to EPSRC **all** non-PDF documents uploaded onto Je-S are converted to PDF, the use of non-standard fonts may result in errors or font conversion, which could affect the overall length of the document.

For advice on writing proposals see:

<https://epsrc.ukri.org/funding/howtoapply/preparing/>.

2. Submitting a Full Proposal

Full proposals invited following a successful outline stage must have the 'Related Grant' field completed in Je-S. Please use the option 'Successful Outline'.

Guidance on writing an application

After short-listing the outline proposals, we will invite a number of applicants to prepare and submit full proposals. Proposal documents will include: case for support, justification of resources requested, a work plan, and a two-page User Engagement Strategy (see below). We will send full details of what is required with the invitation letters, but the structure of the Case for Support will follow normal EPSRC guidelines.

Applicants should use the Ethical Information section on the Je-S form to demonstrate to peer reviewers that they have fully considered any ethical issues concerning the material they intend to use, the nature and choice, current public perceptions and attitudes towards the subject matter or research area. EPSRC will not fund a project if it believes that there are ethical concerns that have been overlooked or not appropriately accounted for. All relevant parts of the Ethical Information section must be completed. If the research will involve human participation or the use of animals covered by the Animals (Scientific Procedures) Act 1986 it is recommended that applicants pay particular attention to the guidance highlighted below. EPSRC reserves the right to reject applications prior to peer review if the Ethical Information sections are not completed correctly.

Further guidance on completing the Je-S form can be found at <https://je-s.rcuk.ac.uk/Handbook/pages/GuidanceonCompletingaStandardG/EthicalInformation.htm>. Other relevant guidance includes: EPSRC's policy on animal use in research (<https://www.epsrc.ukri.org/about/standards/animalresearchpolicy/>) and the Responsible Innovation Framework (<https://epsrc.ukri.org/research/framework/>).

Please note that on submission to EPSRC **all** non-PDF documents uploaded onto Je-S are converted to PDF, the use of non-standard fonts may result in errors or font conversion, which could affect the overall length of the document.

For advice on writing proposals see:

<https://epsrc.ukri.org/funding/howtoapply/preparing/>.

User Engagement Strategy

Successful applicants will be required to develop and execute a strategy for engaging with potential users of the research funded in the project (resources for this activity can be requested and must be justified in the application). An initial version of this strategy should be submitted as a two-page document as part of the full proposal stage. This strategy should be reviewed and updated regularly as part of the formal management of the grant.

The strategy should cover:

- how and when potential users have been / will be identified;
- what form the engagement will take;
- what steps will be taken to ensure that outputs of the research are made available to potential users;
- suitable metrics for determining the success of the strategy in delivering value to users.

This requirement has been included in this call to reflect the importance of engaging with manufacturing industries as part of realising the benefits of the fundamental research we support.

Assessment

Assessment process

This is a two-stage assessment process.

Stage 1: Outline proposals

An outline stage is being used to ensure that projects are a good fit to the scope of the call. There will be no postal peer review of outline proposals. Outline proposals will be considered by an independent panel with the necessary expertise to assess the proposals against the outline assessment criteria listed below. Successful outline proposals will be invited to submit a full proposal.

Stage 2: Invited full proposals

Invited full proposals will undergo postal peer review. If the reviews are sufficiently supportive, the proposal will be assessed and ranked by a panel based on the reviewers' comments and the applicant response, using the full assessment criteria provided below. The panel will consist of relevant experts from across the scope of the call.

In the event of this call being substantially oversubscribed as to be unmanageable, EPSRC reserve the right to modify the assessment process.

1. Outlines

An expert panel will consider the outlines proposals' fit to call and potential for high quality research, and draw up a short-list of the outline proposals based on the information provided in the Je-S form and the case for support.

Assessment criteria for outlines

Outline proposals will be assessed against these criteria:

- Suitability of the research vision
 - The extent of the contribution of the research to the vision of a responsive manufacturing system, either existing or future
 - Appropriateness of the consideration of broader systems issues and challenges relating to the research and its impact
- The alignment of the research programme to the call scope
- Potential for innovative, high-quality research, in particular the transformative aspects or potential outcomes.

2. Full Proposals

Full proposals will be sent for postal peer review. Applications that have received sufficient support from reviewers will be invited to submit a response to reviewers. The final outcome will be based on a rank-ordered list compiled by an expert prioritisation panel.

Assessment criteria for full proposals

Proposals will be assessed based on the following criteria.

Standard Assessment Criteria

- **Research Quality (Primary Criterion)**
 - Relevance to the UK manufacturing research base and potential to provide the UK with unique capability
 - The novelty, relationship to the context, timeliness and relevance to identified stakeholders;
 - The ambition, adventure, transformative aspects or potential outcomes;
 - The suitability of the proposed methodology and the appropriateness of the approach to achieving impact.

(For reviewers: For multi-disciplinary proposals please state which aspects of the proposal you feel qualified to assess)

- **National Importance (Secondary Major Criterion)**

- Evidence of how the proposed research contributes to:
 - Maintaining the health of other research disciplines,
 - Addressing key UK societal challenges
 - Current or future UK economic success and/or enables future development of key emerging industry(ies);
- Meets national strategic needs by establishing or maintaining a unique world leading research activity (including niche capability areas)
- Fits with and complements other UK research already funded in the area or related areas, including the relationship to the EPSRC portfolio, [Research Area strategies](#) and [Delivery Plan](#).
- **Applicant and Partnerships (Secondary Criterion):**
 - Ability to deliver the proposed project,
 - Appropriateness of the track record of the applicant(s)
 - Balance of skills of project team, including collaborators
 - Appropriateness of the User Engagement Strategy and any resources requested for it.
- **Resources and Management (Secondary Criterion):**
 - The effectiveness of the proposed planning and management arrangements
 - Any equipment requested, or the viability of the arrangements described to access equipment needed for this project, and particularly on any university or third-party contribution;
 - The appropriateness and justification of the requested resources
 - Include any resources requested for activities to either increase impact, for public engagement or to support responsible innovation.

Call Specific Criteria

- **Fit to call (Secondary Criterion):**
 - Alignment of the research programme to the call scope

Feedback

Brief feedback may be given to applicants at the Outline stage as directed by the panel.

Reviewers' reports will be made available to all applicants who are invited to the second stage and submit a full proposal. A rank ordered list from the full proposal prioritisation panel will be available shortly after the panel on

<https://gow.epsrc.ukri.org/>. The prioritisation panel may provide specific feedback if deemed necessary, but this will not be given as standard.

Guidance for reviewers

When completing your assessment please use the section marked 'Call Specific Criteria' to address the Fit to Call criterion.

Information about the EPSRC peer review process and guidance for reviewers can be found at: <https://epsrc.ukri.org/funding/assessmentprocess/review/>.

Guidance for reviewing standard grants can be found here:

<https://epsrc.ukri.org/funding/assessmentprocess/review/formsandguidancenotes/standardgrants/>.

Moving forward

Decisions on the outline stage will be released in September 2020, at which point shortlisted applicants will be invited to submit a full proposal. Full proposals will undergo postal peer review followed by prioritisation panel, resulting in a rank ordered list. Additional guidance on the full proposal stage will be provided for shortlisted teams.

If you are currently restricted under the Repeatedly Unsuccessful Applicants Policy, you may submit unlimited outlines but you will only be able to submit one full proposal (as PI or CO-I) during the 12 month restricted period. Outline and full proposals are covered by the EPSRC Resubmissions Policy. Further information about this policy can be found at:

<https://epsrc.ukri.org/index.cfm/funding/applicationprocess/preparing/preparingnewproposals/>.

Submissions of full proposals to this call will count towards the Repeatedly Unsuccessful Applicants Policy. Further information about the policy can be found at: <https://epsrc.ukri.org/funding/howtoapply/basics/resubpol/rua/>.

Key dates

Activity	Date*
Outline Call Open	15 June 2020
Deadline for Outlines	11 August 2020
Call Opens for Invited Full Proposals	17 September 2020
Deadline for Full Proposals	12 November 2020
Prioritisation Panel	February 2021
Funding decision	March 2021
Grant start date (earliest)	From April 2021

*EPSRC aims to adhere to the key dates as published, however there may be exceptions where the sift, prioritisation or interview meeting may have to change due to panel member availability.

Contacts

- Ms Stephanie Williams, Portfolio Manager, Manufacturing the Future Theme. Landline number not currently in use, but please feel free to request a call back via email. stephanie.williams@epsrc.ukri.org
- Mr Tochukwu Ajare, Portfolio Manager, Manufacturing the Future Theme, Tochukwu.ajare@epsrc.ukri.org
- ManufacturingPeerReview@epsrc.ukri.org (Manufacturing the Future Theme central email inbox)
- Je-S Helpdesk – for queries regarding the submission of proposals through Je-S. Incoming calls not currently accepted but you may request a call back via email. JeSHelp@je-s.ukri.org

Please contact your university research office for help and advice on writing your proposal and allow enough time before the closing date for your organisation's submission process.

Change log

Name	Date	Version	Change
Stephanie Williams	8 June 2020	1	N/A

Appendices (includes Attachment Checklist)

Je-S attachments Check List

Outline:

Case for Support	Four pages	Mandatory	Please follow format outlined in How to Apply.
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Standard – for full proposal stage only (not required for outline stage):

Attachment Type	Maximum Page length	Mandatory/Optional	Extra Guidance
Case for Support	Eight pages	Mandatory	Comprising up to two A4 sides for a track record, and

			six A4 sides describing proposed research and its context.
Workplan	One page	Mandatory	
Justification for Resources	Two pages	Mandatory	
CVs	Two pages each	Mandatory	For named and visiting researchers, and researcher co-investigators only.
Project Partner Letters of Support	No page limits	Mandatory	Must be included from all named project partners. Must be on headed paper, and be signed and dated within six months of the proposal submission date.
Letters of Support	No page limits	Optional	In exceptional circumstances a maximum of three letters can be submitted.
Equipment Quotes	No page limits	Not required	Equipment over £10,000 not available through this call.
Equipment Business Case	Two pages each	Not required	Equipment over £10,000 not available through this call.
Technical assessment	No page limit	Optional	For use of a major facility, where applicable.
Proposal Cover Letter	No page limit	Optional	The cover letter can be used to highlight any important information to EPSRC. This attachment type is not seen by reviewers or panel members.

Additional Document	Two pages	Mandatory	A User Engagement Strategy must be included. See above.
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Please ensure you adhere to the above attachment requirements when submitting your proposal. Any missing, over length or unnecessary attachments may result in your proposal being rejected.