

## Quick Reference

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

## Manufacturing Investigator-Led Highlight Notice: NetworkPlus

**Call type: Invitation for proposals**

**Closing date: 16:00 11 December 2018**

**Funding Available:** £5 million for **five** proposals

**How to apply:** Intent to Submit, followed by Full Proposal

**Assessment Process:** Full Proposals will undergo postal peer review followed by an interview panel

### Key Dates:

| Activity                      | Date                   |
|-------------------------------|------------------------|
| Deadline for Intent to Submit | 16:00 24 October 2018  |
| Deadline for Full Proposals   | 16:00 11 December 2018 |
| Interview Panel               | T.B.C May 2019         |

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# Manufacturing Investigator-Led Highlight Notice: NetworkPlus

**Call type:** Invitation for proposals

**Closing date:** 16:00 on 11 December 2018

**Related themes:** Manufacturing the future

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## Summary

The Manufacturing the Future Theme would like to support up to five NetworkPlus grants to stimulate development of manufacturing research and communities within key emerging areas of national importance for manufacturing research. These networks will bring together relevant parts of the interdisciplinary manufacturing communities and a variety of stakeholders, to identify the key research opportunities, build collaborations and grow the area of research for the benefit of the UK. Networks are intended to be UK-wide, and should involve a broad range of disciplines as well as non-academic stakeholders. The NetworkPlus could undertake a variety of activities including workshops, events, feasibility studies, secondments or horizon scanning. Applicants are encouraged to tailor their activities to the needs of the area and to be innovative in their approach.

There is up to £5 million available for this call.

The Manufacturing the Future theme has identified some priority areas which would benefit from having a NetworkPlus. However Manufacturing the Future also welcomes proposals for a NetworkPlus in other areas related to manufacturing research. All proposals will have to make a case for why a NetworkPlus is required in the area.

The priority areas identified are:

- Circular Economy
- Resilient Manufacturing.

The Manufacturing the Future Theme will also be considering an extension to the Connected Everything NetworkPlus. This will be assessed on a separate list but tensioned against new proposals. The £5 million will be used for both new proposals and the extension. The renewal of the network will have different assessment criteria, which are described below.

## Background

The vision for the Manufacturing the Future theme is for the research we sponsor to help solve some of the most serious challenges facing the UK today and in the future. Manufacturing makes a major contribution to the UK economy but further investment is required, particularly in high-value and specialist manufacturing, underpinned by the research base. The goal of the theme is to take research from our science and engineering base that addresses the research issues of scaling-up processes and products required for manufacturing impacts.

EPSRC defines manufacturing research as the design and development of new and existing manufacturing processes, systems and networks, this includes Engineering Design research that underpins the creation and translation of emerging manufacturing technologies. This call is aimed at people working in these areas or in underpinning research areas.

This call is looking to support NetworkPlus grants to help establish a research community, identify research challenges, strategies and opportunities, as well as building new collaborations across disciplines and organisations supported by funds to pump-prime these interactions. EPSRC is looking to ensure that

research ideas can be explored; as part of the NetworkPlus we would expect to see funds available to support explorative preliminary-stage research.

The aims of these NetworkPlus awards will be to:

- Bring together experts from across all relevant research disciplines and stakeholders, building new communities or creating new links between different existing communities;
- Bring focus to the relevant research area, identifying research challenges, opportunities and priorities;
- Support initial exploration of new ideas and kick-start new collaborations;
- Build pathways to impact.

These networks will undertake a variety of activities to bring together relevant manufacturing stakeholders to identify the key research opportunities, build collaborations and grow the area of research, ultimately leading to academic, social, economic, policy or cultural impact. Activities could include workshops, events, feasibility studies, secondments or horizon scanning. Applicants are encouraged to tailor their activities to the needs of the area and be innovative in their approach.

NetworkPlus proposals should be focussed on an emerging area of manufacturing research, and applicants will be required to provide justification of the need for a NetworkPlus in the area they are proposing. The justification should be made regardless of whether the Network is one of the identified priority areas or in another area.

The identified priority areas are:

- **Circular Economy** - A circular economy keeps resources in use for as long as possible at their maximum value. This requires the reuse, repair, remanufacture and recycling of materials and products as well as systems which minimise waste production.
- **Resilient Manufacturing** - This is the development of manufacturing systems which can respond and adapt to, and even learn from, disruptions to the process. These disruptions can be of any scale or nature.

These topics were selected as they are priority topics with EPSRC and have been identified via various mechanisms including the recent Manufacturing Futures Retreat as requiring a community to be engaged in an inclusive activity to help scope out the future direction.

The Manufacturing the Future theme welcomes NetworkPlus proposals in other areas, as long as the area is within the Manufacturing the Future remit. Applicants should use the Manufacturing the Future strategy and priorities to help define whether areas are relevant to the Manufacturing the Future theme, <https://epsrc.ukri.org/research/ourportfolio/themes/manufacturingthefuture/strategy/>.

We are not expecting to receive multiple NetworkPlus applications on the same topic, as applications should be, as far as possible, inclusive of all members of the relevant communities.

NetworkPluses should be highly multidisciplinary. Depending on the topic, it could be important to include other disciplines such as social sciences, economics, arts and humanities, as well as other relevant non-academic stakeholders, to provide the expertise required to co-create and implement novel manufacturing solutions. Network activities should be UK-wide, and open to all relevant researchers. NetworkPlus proposals should complement (and not duplicate) current research activities and existing networks.

Lessons learned from previous NetworkPlus activities include:

- A clear, well-defined topic for the network is needed to focus plans and activities;
- Administrative and host University support for the network is vital, in order to support activities such as feasibility studies and dissemination activities;
- Different scales of feasibility study funding are appropriate for different research topics or disciplines;
- Expectation and arrangements for Full Economic Costing of network activities need to be clear across all parties;
- Long-term plans for the legacy and/or sustainability of the network need to be considered early on;
- Networks should consider interactions with Catapults, as well as wider use of social media.

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

## Funding available

The Manufacturing the Future Theme would like to support up to five NetworkPlus grants, and there is up to £5.0M available in total for both the new proposals and extension.

Awards will be made for between 36-48 months duration. This is to ensure that funding for feasibility studies can be allocated and spent during the lifetime of the award.

Funding requested under the Directly Allocated cost heading may include:

- **Investigators' salaries** - The Principal Investigator (PI) and up to four Co-Investigators (Co-Is) can request funds to cover their salary costs for the time spent on setting up and leading the NetworkPlus. The salary costs of NetworkPlus participants should not be included in the proposal and we would not expect these individuals to be Co-Investigators.

Funding requested under the Directly Incurred cost heading may include:

- **Travel and subsistence** - Travel and subsistence enabling members of the NetworkPlus to meet together to exchange ideas and expertise. This may include visits by or to experts overseas. This may also include travel

and subsistence costs to support secondments. Where possible collaborators should meet their own travel costs.

- **Administrative support** – A sufficient level of administrative support should be requested to help in the co-ordination and management of the NetworkPlus and ensure smooth running of the NetworkPlus including running the allocation of research spending. Reasonable costs for monitoring and dissemination of the NetworkPlus output can also be included.
- **Organisation of Activities** - Funding can be requested for costs involved in running activities such as networking events, expert working groups, debates, online discussion forums, lectures, seminars, problem solving workshops etc. Applicants are encouraged to think creatively about the range of activities that could support the delivery of the NetworkPlus goals.
- **Research** - Research activity to support the research strategy developed within the NetworkPlus. Funds can be requested for PDRA staff, consumables, travel and subsistence and any other costs eligible under 'Directly Incurred' headings. This is likely to include a budget for feasibility studies that can be allocated to researchers at other universities; in this case applicants will need to think carefully about how this budget will be managed. EPSRC would expect some examples of the types of projects at the application stage, but the research challenges should evolve during the course of the network activities and should be co-created and collaborative in nature. The funds for research should be listed under the heading 'flexible funds'

Funding can also be requested for:

- Activities to identify and disseminate key research challenges in the area, for example horizon-scanning studies
- Activities to develop other pathways to impact, such as reports, websites and briefings.

Guidance on the types of support that may be sought is given on the EPSRC website (<https://epsrc.ukri.org/funding/applicationprocess/>).

## **Equality, Diversity and Inclusion**

The long term strength of the UK research base depends on harnessing all the available talent and the Research Councils have together developed the ambitious RCUK Equality, Diversity and Inclusion Action Plan (<https://www.ukri.org/about-us/policies-and-standards/equality-diversity-and-inclusion/>).

In line with the RCUK Diversity Principles, EPSRC expects that equality and diversity is embedded at all levels and in all aspects of research practice. We are committed to supporting the research community in the diverse ways a research career can be built with our investments. This includes career breaks, support for people with caring responsibilities, flexible working and alternative working patterns. With this in mind, we welcomes applications from academics who job share, have a part-time contract, need flexible working arrangements or those

currently committed to other longer, large existing grants. Please see our Equality and Diversity webpages at <https://epsrc.ukri.org/funding/equalitydiversity/> for further information.

## 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

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 to apply to EPSRC is provided at: <https://www.ukri.org/funding/how-to-apply/eligibility/>.

## How to apply

### Submitting an application

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

A single application should be submitted for each NetworkPlus.

When adding a new proposal, you should select:

- Council 'EPSRC'
- Document type 'Standard Proposal'
- Scheme 'Standard'
- On the Project Details page you should select the 'Manufacturing the Future Highlight Notice for Network+' 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 December 2018

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

**Case for Support** up to eight sides of A4, containing:

- Track record of the applicants (2 pages) – details of the PI and Co-Is as well as the initial proposed NetworkPlus membership
- The research scope of the proposed NetworkPlus, and the benefits of the proposed NetworkPlus
- Plans for engagement – details of broader expertise required and how this will be encouraged and monitored. Links to other relevant networks/research
- Planned activities of the network - including examples of some of the events planned for the first 12-18 months of the network, and type and frequency of events for the remainder of the NetworkPlus
- Dissemination plans – including how the NetworkPlus outcomes will be disseminated and how the NetworkPlus activity may be sustained after the lifetime of the grant.

Please ensure that all assessment criteria, as outlined in the section below, are covered within your case of support

**Management plan** (up to 1 page) –Please submit under the Additional Document, document type - this should cover the general management of the network, including role of Investigators and any administrative support; Detailed plans for the management of the preliminary-stage research funds and how applications for funding will be reviewed by the network. This must include how ethical and Responsible Innovation considerations will be incorporated into the process.

**Workplan** (up to 1 page) - this should show a timetable of planned activities associated with the NetworkPlus.

**Justification of Resources** (up to 2 pages) - this should provide a full justification for all the resources you have requested, including the amount requested for preliminary-stage research.

**Pathways to Impact** (up to 2 pages) - this should detail plans for ensuring the NetworkPlus has impact. This can include dissemination of network outcomes (2 pages).

**Project Partner Letters of Support** - from any partners contributing direct cash or in-kind support to the NetworkPlus (note: these should be listed on the Je-S form as project partners). Where appropriate up to three additional letters of support from international or industrial collaborators only can be included. Letters of support are not required for UK academic institutions.

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://epsrc.ukri.org/about/standards/animalresearchpolicy/>) and the Responsible Innovation Framework (<https://epsrc.ukri.org/funding/applicationprocess/preparing/>).

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/applicationprocess/preparing/>.

## **Assessment**

### **Assessment process**

The Intent to Submit will be used by EPSRC to assess the number and type of proposals being submitted. To complete the Intent to Submit form, please visit the call page on the EPSRC website (<https://epsrc.ukri.org/funding/calls/manufacturingnetworkplus/>), where the form is embedded.

An Intent to Submit must be submitted for the full proposal to be accepted. The Intent to Submit will collect information on the Principle Investigator, Co-Investigators and the topic of the NetworkPlus proposal. There can be changes to the Co-Investigators and an evolution of the topic between the Intent to Submit and full proposal, without consultation with EPSRC. If the Principle Investigator or overall topic changes then the Principle Investigator should contact EPSRC (see below).

Proposals will undergo postal peer review and be assessed against all of the assessment criteria. Proposals will then go to an interview panel. The interview will be assessing all assessment criteria.

Feedback will only be provided if requested by the panel.

### **Assessment criteria**

#### **Quality**

- The novelty, relationship to the context, and timeliness
- The ambition, adventure, and transformative aspects identified
- The appropriateness of the proposed activity

#### **National Importance**

- Meets national needs by establishing a unique world leading activity
- The complementarity to other UK activity in the area

- The potential for the grant to have a significant research impact and for NetworkPlus outcomes to be exploited.

### **Impact**

- The relevance and appropriateness to any beneficiaries or collaborators
- The appropriateness of engagement plans to accelerate impact via information dissemination and knowledge exchange.

### **Applicants' ability to deliver the proposed research**

- Appropriateness and the track record of the applicants
- The balance of skills of the project team, including academic and non-academic partners.

### **Resources and management**

- The effectiveness of the proposed planning and management structure
- The appropriateness and justification of the requested resources
- The suitability of the process for allocation of feasibility funding and the governance plans for the projects.

### **Fit to NetworkPlus scheme**

- Added value that this network will enable
- The mechanisms for broadening the collaboration and opportunities with the wider community and appropriate stakeholders
- The appropriateness of planned activities to allow the generation and implementation of ideas
- Sustainability of the activity after the lifetime of the grant.

For the NetworkPlus Renewal, the assessment criteria will be the same except for the Quality Criteria, which will have the additional points:

### **Quality**

- The difference in scope, compared to the original network and the need for this change
- The need for additional EPSRC funding for this activity.

### **Guidance for reviewers**

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/>.

## Additional grant conditions (AGCs)

In addition to the standard terms and conditions grant holders will be required to appoint an independent advisory board to provide advice on the strategic direction and activities of the network. This advisory board should have a membership (agreed with EPSRC) drawn from the academic, industrial and international scientific community and include a representative from EPSRC.

Notwithstanding standard grant condition RGC6 concerning the transfer of funds between headings, the sum £\*\*\*\*\* awarded under the heading of 'flexible funds' can include both directly incurred and directly allocated expenditure. These funds must be reported on the final expenditure statement (FES) as awarded on the offer letter and a breakdown of the expenditure must be submitted along with the FES. If a breakdown of this expenditure is not received the FES will be returned. Standard grant conditions apply to all other funds awarded on this grant.

Standard grant conditions apply to all other funds awarded on this grant.

## Moving forward

Submissions 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/applicationprocess/basics/resubpol/rua/>.

## Key dates

| Activity                      | Date*                  |
|-------------------------------|------------------------|
| Deadline for Intent to Submit | 16:00 24 October 2018  |
| Deadline for Full Proposals   | 16:00 11 December 2018 |
| Interview Panel               | T.B.C May2019          |

\*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

- Shyeni Paul ([Shyeni.paul@epsrc.ukri.org](mailto:Shyeni.paul@epsrc.ukri.org); 01793 444431)
- Agnieszka Dzielendziak ([Agnieszka.Dzielendziak@epsrc.ukri.org](mailto:Agnieszka.Dzielendziak@epsrc.ukri.org); 01793 444097)

## Change log

| Name        | Date   | Version | Change |
|-------------|--------|---------|--------|
| Shyeni Paul | 6.9.18 | 1       | N/A    |
|             |        |         |        |

## Appendices (includes Attachment Checklist and Fund Headings)

### Je-S attachments Check List

#### Standard:

| Attachment Type                    | Maximum Page length | Mandatory/Optional   | Extra Guidance  |
|------------------------------------|---------------------|----------------------|---|
| Case for Support                   | 8 pages             | M                    | Comprising up to two A4 sides for a track record, and six A4 sides describing proposed research and its context.                                      |
| Additional Document                | 1 Page              | M                    | Management Plan - Covering the general management of the network and the management of the research funding   |
| Pathways to Impact                 | 2 pages             | M                    |   |
| Workplan                           | 1 page              | M                    |   |
| Justification for Resources        | 2 pages             | M                    |   |
| CVs                                | 2 pages each        | As Required by EPSRC | For named and visiting researchers, and researcher co-investigators only.   |
| Project Partner Letters of Support | No page limits      | As Required by EPSRC | 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 | As Required by EPSRC               | In exceptional circumstances a maximum of three letters can be submitted.  |
| Technical assessment  | No page limit  | As required by EPSRC               |  |
| 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.      |
| Other attachment      | No page limit  | As required, at EPSRC request only | This can be used for a document that does not fit under any of the headings above. This attachment type is not seen by reviewers or panel members. |

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.