Digital Solutions: Programme Requirements

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Programme requirements

- To deliver broad, lasting impact through the delivery of economic and societal benefits from data held both by NERC and third parties.

- To work closely with stakeholders across the non-academic community in order to generate a step-change in the availability and usefulness of data products to users, allowing them to readily exploit this information.
Programme requirements

- To facilitate access to not only environmental data, but also new multidisciplinary datasets
- To take collaborative approaches towards the provision of solutions
- To deliver impact, both in policy and economic terms.
- To provide evidence of this through the use of case-studies, narratives and data-journeys.
Delivery team

- The track record and expertise of the institution will be highly relevant to achieving the programme outcomes.

- The proposal must be able to demonstrate a critical mass of capability that has been developed within the institution, across relevant disciplines, with strong leadership and a skilled support team to address this challenge.

- Applicants should seek to create an integrated approach, managed at the institutional level, which does not divide funding into disaggregated activity across departments.
The total funding available to support this programme, to be controlled by the programme leader, includes:

- NERC strategic research and innovation programme investment: **up to £5.0m over 5 years**.
- NERC capital investment: **up to £3.0m over 5 years**.
- NERC Environmental Data Service (EDS) costs to support this programme: **up to £0.4m pa** (£2.0m over 5 years)

- Plus any further direct or in-kind investment made or leveraged by the host institution.
Funding

- NERC investment will be phased as follows:
  
  - An initial **6-9 month scoping stage**, supported with c£20k (subject to agreement), to allow the successful institution, programme leader and team to develop and submit a strategy and plan for the remaining 4+ years. This proposal should identify communities and users who can generate challenges, opportunities and impact through the use of data, and a plan for achieving this. NERC will provide support throughout the scoping stage.
  
  - NERC gateway decision on the costed plan.
  
  - Remaining funds described above will be released as agreed by NERC and justified in the plan.
Funding

- Given the partnership required to deliver impact using data, NERC expects that a minimum of one third of the programme budget will be sub-contracted to other partners for collaborative activities.

- Collaborative partners must meet NERC eligibility criteria for funding, where partners are delivering a service sub-contracted parties must comply with UKRI procurement guidance. NERC programme funds may be used to support staff and other costs in the host institution, and to commission collaborative activity involving data provider(s), users and third party services (including the programme leader’s institution), subject to justification in the plan and agreement by NERC.

- The plan should also include consideration of how to manage demand, activity, leveraged funding and IP generated by the programme.
Relationship with the EDS

- NERC's environmental data centres operate collectively, with common management, to ensure that data holdings are readily available to end-users. Together the data centres collectively form NERC's Environmental Data Service.

- The EDS will provide the underpinning infrastructure and data science expertise to support the growing requirements of the Digital Solutions initiative and in particular its ambition to support engagement with non-academic user communities.

- The Digital Solutions programme will work closely with the NERC EDS and other data providers to integrate activities and direct the funding so that data is made available in response to the demands created by the programme.
Management and Governance

- Strong leadership and management is essential to the successful delivery of the programme. Representatives from the different elements of the programme, including service users and providers, should be included within governance structures. An ongoing and close working relationship will be required between the programme and NERC HO.

- The proposal should outline robust and transparent governance arrangements, which may include formal partnership agreements, communication plans and systems for monitoring the programme’s overall progress and success.

- Applicants wishing to use a NERC service or facility should refer to further information on the NERC website. Much of the programme will focus on creating impact from existing data sets. As a result there may be movement, sharing or integration of large data sets which the data management plan should address, **beyond the usual archival and creation elements**. This should include a clear approach for addressing such opportunities and overcoming potential problems.
The proposal should outline an efficient reporting process for the programme which ensures:

- The senior leadership maintain oversight of activities to inform reporting within governance structures.
- Progress reports are submitted at agreed intervals to the governance team.
- NERC will maintain regular contact with the programme, in order to monitor progress and take action where necessary to aid the programme in planning and delivery of the desired outcomes.
- The proposed programme of work will set out key milestones and metrics using the desired programme outcomes. These metrics will be a key tool for monitoring the performance of the programme.
- Programmes will be expected to participate in or provide input to meetings to raise awareness of the programme of activity and publicise the innovative outputs resulting from the award.
Expertise and Skills

A successful programme will require expertise in and experience of delivery through a variety of skill sets. The institution, programme leader and support team must collectively demonstrate a strong track record of:

- Working successfully with business and policy communities to deliver impact using data. The proposal should outline the main stakeholders and stakeholder groups the initiative would engage with.
- Effective delivery and facilitation of access to multi-disciplinary data sets from a range of sectors to create synergies, add value, deliver and evidence impact.
- Acting as a champion, convener, facilitator and broker, effectively communicating the opportunities associated with the use of data, the barriers faced by user communities, and creative solutions to these issues.
- Excellent senior level leadership, partnership-building and influencing capability.
- Sufficient level of technical expertise and understanding of data science, data infrastructure and capability within the UK. The successful candidate will be able to understand user opportunities and needs, how they can be delivered and how data providers can meet these needs.
- Use of marketing and business development skills to deliver uptake of novel offerings in a data context.
- Excellence in the delivery of postgraduate training programmes in a relevant field.
Expertise and Skills

Key roles within the delivery team will include:

- **Marketing:** Actively seeking innovators and user communities who can build and deliver digital services, raise awareness of the richness of environmental and other data available for this purpose, identify opportunities and build effective collaborations to deliver impact.
- **Brokerage and facilitation:** Bringing together NERC and wider data providers with innovators and users to identify opportunities, understand technical needs and overcome barriers.
- **Programme development, management and delivery:** Generating, enabling and ensuring delivery of a focused portfolio of user-led projects that will deliver impact and evaluation enabling impact to be demonstrated.
- **Programme monitoring and evaluation:** Monitoring and reporting progress in achieving project and programme goals. Build in customer feedback and learning to support continual improvement of data service provision and programme delivery.
- **Evidence of impact:** Working with data providers and users to create ‘data stories’ and evidence of impactful outcomes (economic, social and environmental benefits).
Application process

- Outline proposals must contain a case for support which addresses the announcement of opportunity [up to 4 sides A4, including a track record and a short statement from an appropriate senior member of the lead organisation].

- It is the responsibility of applicants to undertake sufficient planning at the outline proposal stage to determine that the full costs of research proposed (including any facility costs) can be accommodated within the fixed financial limits of the scheme.

- No CVs or project partner letters should be submitted at the outline proposal stage.

- Applicants will be informed by 20th December if they are to be invited to proceed to the full proposal stage. The full proposals will be sent to reviewers for comment and all the full proposal teams will be interviewed to determine the awards.
What activity can be included?

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<thead>
<tr>
<th>Eligible</th>
<th>Ineligible</th>
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<tbody>
<tr>
<td>Activity that supports user access to data</td>
<td>Fundamental research</td>
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<tr>
<td>Translation of existing data, knowledge and/or expertise into tools, solutions and approaches that meet user needs</td>
<td>Capital investment (but see information in Section 3.3)</td>
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<tr>
<td>Decision-support tools incorporating data, knowledge and know-how</td>
<td>The research community acting as consultants for commercial third parties</td>
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<tr>
<td>Model synthesis, merging and manipulation that addresses specific challenges, needs or opportunities</td>
<td>Activity between only different sections of the research community</td>
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<tr>
<td>Commercialisation focused upon taking research community outputs further towards exploitation for likely economic return</td>
<td>Activity between only the research community and the general public</td>
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<tr>
<td>Community building activities to support the longevity of programme outcomes and impact</td>
<td>Training</td>
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<td>Training</td>
<td>Studentships</td>
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Assessment process

Outline stage:

- The outline proposals will be assessed by a panel made up of independent experts and NERC head office representation that will be co-chaired by NERC and an independent chair. Any sift of proposals will be made on the basis of the likely fit of proposals to requirements of the call. The panel will provide brief feedback to applicants summarising why their proposal was successful/unsuccessful. No further feedback will be available.

- Outline Proposals will be assessed on:
  - Fit to the stated purpose and outcomes, as expressed in the call.
  - Potential for excellence and impact.

- Further information on the assessment process for the full proposal stage will be provided to the applicants successful at the outline stage.
- **Outline Proposals deadline:** 4pm on 7 November 2019
- **Full Proposals deadline:** 4pm on 28 February 2020
- **Full AO:**