**Call Reference: DN474464**

*Met Office tendering on behalf of BEIS.*

 **Expressions of Interest for: SPF Climate Resilience – Standards for climate services and monitoring and valuing climate services.**

**To register your interest, see notes at the end of this page. Registering interest requires no proposal detail at this stage and carries no obligation to bid.**

**Please note that this Expression of Interest is open to UK researchers only.**

**Grant Funds for the period 1st October 2020 - 30th September 2022**

**Call for competition to cover the following call:**

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| **Lot number** | **Title** | **Amount (100% FEC)** | **Amount (80% FEC)** |
| **CR20-2** | **Standards for climate services and monitoring and valuing climate services** | **£250,000** | **£200,000** |

**Key Dates**

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| --- | --- |
| **Estimated Publish of Call:***(Start of bidding period).*  | End April 2020*A notification email will be sent to parties who have formally registered their interest by way of clicking on the ‘Register Interest’ button displayed below the opportunity on the ProContract portal* |
| **Estimated Bidding Period:**  | End April 2020 – July 2020 |
| **Estimated Award of Call:**  | August 2020 |
| **Estimated Delivery Period:** | **1st October 2020 - 30th September 2022** |

**Background to Requirement**

The SPF UK Climate Resilience (UKCR) Programme draws together climate research and other relevant national expertise to develop and deliver robust, multi-disciplinary climate risk and solutions research to improve the UK’s resilience to climate variability and change.

Standards are a key mechanism to guarantee the suitability, quality, and performance of technological solutions. They also provide common terminology between user, provider, and purveyor communities. The need for quality control, standards and certification for climate services has emerged in consultations with users during the design of the European Roadmap for Climate Services, as well as globally through the World Meteorological Organization. Thus, standards may relate to the content of climate services, how they are developed and how they are delivered or indeed the underlying datasets upon which they are built.

There currently are no agreed standards for climate services (although ethical frameworks have been proposed[[1]](#footnote-2) and their suitability for UK climate services[[2]](#footnote-3) should be considered here as part of the standards) and this activity will undertake the ambitious task of proposing and establishing a coherent set of standards for climate services. Consideration should be given to different types of climate service providers, including from both the public and private providers and for public and private sector users. Users from a range of different end-user sectors should be considered.

Note that this work will focus on the standards associated with the delivery of climate services. This is different from standards that may exist within certain sectors regarding the consideration of climate change within their sector (e.g. within the construction sector regarding future changes to flood risk). Sector specific standards are considered through another SPF project led by JBA Consulting[[3]](#footnote-4). Cross-fertilisation of ideas or approaches between the two projects would be welcomed but is not a core requirement of the call.

The work should draw on expertise nationally (for example from within the NFCS as it develops) and internationally (for example through the GFCS). This will build on work such as that in ISO documents on adaptation and risk[[4]](#footnote-5) and, where appropriate, draw on results and findings from other UKCR projects such as those included in Work Package 3.

There will be a clear link between this work and the other activity in Work Package 4 tasked with developing the UK’s National Framework for Climate Services, as well as wider activities under the GFCS and other international climate service standards. Bidders must explain how this will be effectively achieved in this project.

In addition to developing standards for climate services this activity will also carry out a companion task of developing and testing a methodology for monitoring and valuing climate service delivery and uptake[[5]](#footnote-6). This may help to determine if it is possible to stimulate a market for climate services in the UK, a topic which the European Commission is actively pursuing in Europe. Where appropriate this work will also draw on results and findings from other UKCR projects, including using climate service pilots in Work Package 3 as a test bed or learning lab. The work should take account of good practice in HMG socio-economic appraisals, for instance from the Green book.

The project will include a desk-based review and consultation on existing approaches to valuing services, including non-monetary benefits. It will then apply the methods deemed to be most appropriate and produce a set of case studies and guidance for using the methods, as well as publishing the findings in appropriate peer reviewed articles as part of the quality control and dissemination process.

**Background to the Climate Resilience Programme**

How do we make our cities and regions resilient to climate change? What are the opportunities to manage adaptation to deliver improvements to society and economic growth? These are broad and urgent questions for decision makers from national to local scales, in Government, business and society. They present huge challenges because the knowledge and information required to support robust decisions is largely unavailable. There are two major knowledge gaps:

1. The robust characterisation and quantification of climate-related risks in decision-relevant terms.

2. The development of effective adaptation strategies that deliver resilience, improve lives, and promote economic growth.

The need and urgency for building resilience: It is widely recognised that the impacts of extreme weather and climate change permeate throughout society affecting both lives and livelihoods. UK flooding events in 2007 affected 55,000 homes, killed 13 people and cost the UK economy £3.2 billion. Global impacts of extreme weather events also affect the UK, for example international food production. The situation can be exacerbated when events are compounded, for example the co- occurrence of hot and dry summers. As the climate warms, extreme events and the ensuing costs to society will increase. As noted by Lord Krebs, former Chair, Adaptation sub-Committee of the Committee on Climate Change, the UK has a ‘fragmented multidisciplinary research community’ who have failed to work across disciplines, and sectors, to confront the risks we face from climate change.

Exploiting the opportunities arising from adaptation and green growth: There is an opportunity during the transition to a low carbon future to exploit the co-benefits of climate resilient development. Alongside increasing climate resilience, we can design better environments that promote improved quality of life and that facilitate new economic opportunities. A particular opportunity is to stimulate the development of a new generation of 'Climate Services' that will exploit novel understandings including behavioural insights at all levels to inform policy and regulations, technology innovations and engineering solutions needed to build resilient futures across the UK and internationally.

The objectives of this investment are:

1. The robust characterisation, quantification and communication of climate-related risks.

Climate risk is an integration of weather and climate hazards (e.g. heavy rainfall event), the impacts of these hazards across the natural and human environment (e.g. flooding), vulnerability (e.g. inadequate flood defences) and exposure (e.g. assets built on a flood plain). The aim is to develop robust approaches, including the software tools, needed to quantify current and future risk in decision relevant metrics. This involves fundamental research challenges including: end to end understanding of key processes and uncertainties; understanding behavioural responses at individual, community, regional and (inter)governmental levels to climate risk; providing climate information at relevant spatial scales; different risk communications routes; improving the skill and reliability of near-term climate forecasts; combining hazard-vulnerability-exposure information into risk metrics; and perception of risk by decision makers.

2. Develop risk-informed resilience and optimise the opportunities from a transition to a low carbon future

Building a low carbon future presents opportunities to both increase national resilience and provide co-benefits including improvements to wellbeing and economic opportunities. The fundamental research needed includes: design of decision frameworks to balance between protection, co- benefits and costs; development of new adaptation approaches; behavioural changes; and monitoring of the effectiveness of adaptation.

3. Co-produce pilot end-to-end climate services

Climate services are at an early stage of development and new research will: develop novel co- production processes; develop industry quality standards; and investigate governance approaches and design improved monitoring.

For further information please visit the programme website -

https://www.metoffice.gov.uk/research/collaboration/spf/spf-opportunities

**Eligibility**

The following criteria must be met by UK organisations submitting a bid against Strategic Priorities Fund (SPF) funded Calls to be eligible to apply or be awarded funds against this Call:

- Must be a UK operating and registered organisation.

- Consortium bids are eligible; a lead partner must be nominated for payment and agreement purposes and all parties must be UK operating and registered organisations. Details of all consortium members must be provided.

- Funding can only be used to fund new activity for the costs incurred.

- The activity must last the full duration of the Grant Award Term specified

- There must be a willingness to work with Authority and other organisations and individuals associated with the SPF Programme.

**How to Apply:**

The above Expression of Interest is advertised on the Met Office ProContract e-Tendering portal called ProContract. To access and register your interest you will need to log onto the ProContract portal via this link: tenders.metoffice.gov.uk

You may need to search for the Call reference DN474464

**You will need to register your company (if you have not already done so) and register your interest against the opportunity before you are able to access the tender documents.**

If you require guidance or ‘how to’ instructions – see the supplier manuals on the right-hand side of the supplier home page.

**Online Discussions between Bidders and the Met Office:**

There is a Discussions function on ProContract which shall be used to provide all further information regarding this opportunity including any changes to time scales, scope or clarifications. This function must be used by bidders to submit all clarification questions.

1. <https://public.wmo.int/en/resources/bulletin/call-ethical-framework-climate-services> [↑](#footnote-ref-2)
2. This piece of work should focus on standards for products consumed in the UK rather than on standards for products developed in the UK and deployed elsewhere. [↑](#footnote-ref-3)
3. <https://www.ukclimateresilience.org/news-events/new-met-office-projects-announced/> [↑](#footnote-ref-4)
4. <https://www.iso.org/standard/68507.html> [↑](#footnote-ref-5)
5. Note that “value” can be defined more broadly than in purely financial terms (eg through some measure of wider societal aspects). [↑](#footnote-ref-6)