

**Request for Proposal (without commitment)**

**Statistical Support Services**

**SUPPLIER NAME:**

**[BIDDER TO INSERT NAME]**

**Section One: Instructions**

* Please complete this Request for Proposal (RFP) document and submit via the [Met Office Procurement Portal](https://tenders.metoffice.gov.uk/procontract/metoffice/supplier.nsf/frm_home?openForm)no later than:**Wednesday 3rd November 2021 12:00 Noon**. RFP’s received after that time may be disregarded.
* We would like to invite proposals from UK based organisations only.
* Please answer all appropriate questions and sign where specified. You may continue on a separate sheet where necessary. Your replies (including any supporting documentation) must be clearly referenced.
* The Contract shall be subject to the Met Office’s Standard Terms and Conditions, a copy of which has been attached at Annex A.
* The Met Office does not bind itself to accept the lowest or any RFP, and reserves the right to accept an RFP either in whole or in part, for such item or items specified in the RFP
* The Met Office shall not be liable for any costs or expenses incurred by the supplier in connection with the completion or submission of this quotation
* All queries should be submitted via the [Met Office Procurement Portal](https://tenders.metoffice.gov.uk/procontract/metoffice/supplier.nsf/frm_home?openForm)

Freedom of Information, Transparency and Environmental Information Regulations

Suppliers should be aware that, should they be awarded the Contract, the content of the Contract will be published by the Met Office to the general public in line with government policy set out in the Prime Minister’s letter of May 2010 (http://www.number10.gov.uk/news/statements-and-articles/2010/05/letter-to-government-departments-on-opening-up-data-51204.)

Before publishing the Contract, the Met Office may redact any information which would be exempt from disclosure if it was the subject of a request for information under the Freedom of Information Act 2000 (“the FOIA”) or the Environmental Information Regulations 2002 (“the EIR”).

The FOIA and the EIR provide a more general statutory right of access to information held by or on behalf of public authorities, including information provided by third parties such as suppliers. This right of access is subject to a number of exemptions, including confidential information and commercially sensitive information. Further details of the Met Office's policy on FOIA can be found on the Met Office web site <http://www.metoffice.gov.uk/about-us/legal> click on Freedom of Information located at the bottom of the page.

In order to assist the Met Office in applying the exemptions in the FOIA and the EIR, Suppliers should complete the attached Suppliers Commercially Sensitive Information Form at Annex B, explaining which parts of their RFP they consider to be commercially sensitive. Suppliers are also requested to include on the Form the details of a named individual who may be contacted with regard to FOIA and EIR.

Suppliers should note that, while their views will be taken into consideration, the ultimate decision whether to publish or disclose information provided to the Met Office lies with the Met Office. Suppliers are advised to give as much detail as possible on the Form. It is highly unlikely that a RFP will be exempt from disclosure in its entirety. Should the Met Office decide to publish or disclose information against the wishes of a Supplier, the Supplier will be given prior notification.

**Section Two: Scope of work and background information**

* 1. **Introduction to the Met Office**

As a world leader in providing weather and climate services, we employ more than 1,700 people at 60 locations throughout the world. We are a Trading Fund within the Department for Business Energy and Industrial Strategy, operating under set targets and returning a dividend.

Recognised as one of the world’s most accurate forecasters, we use more than 10 million weather observations, an advanced atmospheric model and a high-performance supercomputer to create 3,000 tailored forecasts and briefings every day. These are delivered to a huge range of customers from the Government, to businesses, the general public, armed forces, and other organisations.

As a foremost weather and climate service, we play a key role on the international stage by providing vital services, advancing global understanding through research and being an important participant in projects and organisations.

We are at the forefront of climate change research, playing a key role in helping determine the worldwide response to climate change. Our involvement in global collaborative projects includes advising the Intergovernmental Panel on Climate Change (IPCC) and our tailored advice and services help decision-makers and businesses across public and private sectors to manage risks and opportunities associated with a changing climate.

Further information about the Met Office is available on the following website:
<http://www.metoffice.gov.uk>

* 1. **Scope of Work**

Within the Met Office there is an increasing body of applied scientists whose job it is to provide advice to enable customers to understand and adapt to the implications of weather and climate change on their activities. We provide advice and guidance to a range of sectors including aviation, defence, energy and transport. As such our customers can be from the public sector, the private sector and also those in Developing Nations.

In order to deliver our work effectively we require a wide range of skillsets that include experts in weather and climate science as well as those who have complementary skillsets in subjects such as geology, chemistry, hydrology and decision science. One area that we are looking to increase our capabilities is in the area of applied statistics.

Examples of the sort of statistical techniques that we employ include generalised linear and additive modelling, temporal and spatial modelling of environmental data, techniques for data imputation (gap filling) and bootstrapping, Bayesian statistical modelling, extreme value analysis, statistical downscaling of weather and climate information, and forecast verification.

These techniques have been used to inform key insights in both academic journal articles and Met Office technical reports. For example, generalised linear/additive models have been used to estimate return periods of tropical cyclones in a spatially coherent manner over Bangladesh (Steptoe and Economou, 2021)[[1]](#footnote-2), and to explore historical trends and variability in heat waves in the UK (Sanderson et al., 2017). Temporal modelling techniques have been used to assess the interconnectivity of global weather events, relevant for insurance risk (Met Office, 2016), and to model and stochastically simulate physically plausible rainfall in Eastern England, for use in water industry drought risk assessment (Dawkins et al., 2021). Further, extreme value analysis methods have been developed and applied to estimate very extreme (1 in 10,000 year) daily maximum temperatures to inform Nuclear power plant design safety (Newell et al., 2021) and to quantify the likelihood of extreme rainfall drought events in UK water industry catchments (Brock et al., 2016).

 Reference

Steptoe H, Economou T. (2021) Extreme wind return periods from tropical cyclones in Bangladesh: insights from a high-resolution convection-permitting numerical model, Natural Hazards and Earth System Sciences, volume 21, no. 4, pages 1313-1322, DOI:10.5194/nhess-21-1313-2021.

Sanderson MG, Economou T, Salmon KH, Jones SEO. (2017) Historical trends and variability in heat waves in the United Kingdom, Atmosphere, volume 8, DOI:10.3390/atmos8100191.

Met Office (2016) Lloyd’s Emerging Risk Report, Met Office Technical Report for Lloyd's of London.

Dawkins LC, Osborne JM, Economou T, Darch GJC, Stoner OR. (2021) The Advanced Meteorology Explorer: a novel stochastic, gridded daily rainfall generator, Journal of Hydrology (in review).

Newell P, Economou T, Brown S, Dunstone N, Sanderson M, Price D, Lewis M, Wallace E, Garry F, Fournier N, Courtney, T. (2021) Extreme temperature estimation using observations and climate model simulations, Journal of the Royal Statistical Society: Series C (in review).

Brock E, Wade S, Economou T, Sanderson, M. (2016). The Water Resources East Anglia rainfall generator: Technical report on model set up and quality assurance of stochastic outputs, Met Office technical report for Water Resources East

**2.3 Scope of Contract**

The Met Office intends to award a 2-year contract for services agreement.

The Contract will commence from December 2021.

**2.4 Indicative timetable**

|  |  |
| --- | --- |
| **Stage** | **Target Times** |
| Proposal return date: | Wednesday 3rd November 2021 12:00 Noon |
| Evaluation of Proposals: | Thursday 4th November to Friday 19th November 2021 |
| Date for Microsoft Teams Interview  | Tuesday 16th November 2021 |
| Notification of Outcome:  | Week Commencing Monday 22nd November 2021 |
| Contract to be awarded: | Wednesday 1st December 2021 |
| Proposed start date: | Monday 3rd January 2022 |

**2.5 Evaluation of Proposal Criteria:**

The ‘General Science Award and Evaluation Criteria’, provided as supporting documentation, will be used to assess the proposed approach to meeting the ‘General Requirements’ outlined in section 3.1. The scored criteria will be weighted as: 80% for Quality, 20% for Value for Money. Where the overall score is less than 50%, further clarification will be sought. Following a review of the proposal we will invite a subset of the applications for interview via Microsoft Teams during which we will assess which candidate/s is best suited to deliver this work.

**Section Three: Specification of requirements**

**3.1 General Requirements**

We are seeking to obtain the services of a lecturer, or equivalent level within a research establishment in statistics. The expectation is that services being provided will be the equivalent 0.5 FTE (typically working on average 2.5 days a week) with the focus of the services being to develop the capabilities of applied scientists in the field of statistics and to support the delivery of project work, specifically:

1. To provide independent review of statistical approaches, and the associated code, in selected pieces of Met Office project work whether this take the form of research or consultancy work.
2. To work with Met Office staff to solve Met Office customer problems – through the pragmatic development of new statistical approaches or application of latest statistical techniques.
3. To deliver occasional ad hoc consultancy on behalf of the Met Office.
4. To provide support for those staff exploring the relevance of Machine Learning techniques in addressing customer problems. To support in the delivery of basic statistical training to Met Office science staff, both as a standard course and in an ongoing mentoring capacity.
5. To pull in wider expertise from any pre-existing academic or sector links/networks (this could be in a personal capacity or as part of existing employment) to further the work of the Met Office (e.g., through MSc programmes, joint PhDs etc).

**Person Specification**

Providing services, the equivalent of 0.5 FTE and typically working on average 2.5 days a week, we would expect the successful applicant/s to demonstrate the following qualities and characteristics:

***Essential qualifications and skills:***

1. *Postdoctoral research experience (or equivalent) in statistical modelling;*
2. *Demonstrated ability to produce and publish excellent research, ideally in an area of environmental statistics related to weather and/or climate science;*
3. *Competence in the use of relevant statistical languages/packages including R and python.*
4. *Evidence of ability to prepare and teach statistics training courses (at undergraduate and postgraduate level or equivalent);*
5. *Experience of successful engagement and consultancy with industry that demonstrates the ability to listen actively, discuss and understand the needs of others and propose suitable innovative applied solutions, learning new concepts where necessary, to address those requirements.*
6. *Ability to work well as part of a team both mentoring and learning from colleagues, and provide expert advice to the level of being able to direct the work of more junior staff.*
7. *Demonstrated ability to communicate technical information to specialists and non-specialists using a range of communication methods.*

***Other desirable qualities:***

1. *An active and supportive approach to inter-disciplinary and multi-disciplinary research that will help to foster interactions and links both within the host organisation and the Met Office.*
2. *Ability to demonstrate knowledge of effective means of ensuring quality, including testing strategies and code review.*
3. *Appreciation of statistical methods of most relevance to weather and climate applications, including Bayesian statistical approaches, spatio-temporal modelling, generalised additive models and extreme value analysis.*

This request for proposal must present:

1. A written statement of no more than 2 pages that outlines the proposed approach to meeting this requirement. The statement should include the approach to meeting this requirement given the prevalence of remote working and synchronous / asynchronous working patterns.
2. The CV of the individual(s) proposed that addresses the person specification described above.
3. A financial breakdown within pricing schedule to include any in-kind contributions.

**3.2 Bidder Response**

Please provide a written statement of no more than 2 pages that outlines the proposed approach to meeting this requirement.

[Please include response here or provide a reference if appending a separate document - relevant Expertise Statement & CV’s]

**Section Four: Pricing Schedule**

**NOTES:**

Pricing to be quoted in pounds sterling (£).

All the above prices are to be exclusive of VAT.

The Met Office will not be bound to accept any additional costs, fees or charges which have not been expressly included below.

Total budget available for this work is expected to be up to the value of **£100k**

**4.1**  **Financial Breakdown**

Please provide a pricing breakdown below.

If services outlined in your proposal are supported by more than one individual, please also include a resourcing breakdown outlining the FTE of the team that will be supporting this contract or provide a reference if appending a separate document.

|  |  |
| --- | --- |
|  **Financial Breakdown** | **£ GBP** |
| **Direct Costs** |
| Staff Direct Costs   |  |
| Travel and Subsistence Costs  |  |
| **Indirect Costs**  |
| Other indirectly incurred costs e.g. overheads (please explain)  |  |
| **TOTAL**  |  |

Indirect Costs:

[Please include response here]

**4.2**  **In-Kind Contributions**

Please provide a summary of in-kind contributions (where appropriate). This is the added value from your organisation or that the individual can bring to the Met Office e.g. pre-existing links to academic institutions or well established links with sector networks.

Please see examples below but this list is non-exhaustive and can be amended or removed as required

|  |  |  |
| --- | --- | --- |
| In-kind Contributions (VfM)  | Details   | Value £ (if applicable) |
| e.g pre-existing links with academic institutions |   |   |
| e.g Time not charged  |   |   |
|  |   |   |

**Section Five: Declaration**

{lease respond to all the following questions as indicated.

**1.  REGISTERED COMPANY DETAILS**

☐ Please tick this box to confirm that all the details below are held on your Met Office eTendering portal registration, they are given below as reference only and do not need to be reproduced within this document.

**Note: All information must relate to the company or department that is responding to this Call except where specified otherwise.**

* Full legal name of Company and where applicable Registration Number.
* Company Status i.e. private or public limited partnership, etc.
* Address of registered office.
* Telephone number of registered office.
* Fax number of registered office.
* Email address of registered office.
* Name and address of Parent Company if applicable.
* Is your organisation a Small or Medium Sized Enterprise (SME)?

**2. FINANCE AND INSURANCE**

The Met Office requires the following levels of insurance to receive funding:

* public liability insurance with a limit of indemnity of not less than two million pounds (£2,000,000) in relation to any one claim or series of claims arising from the provision of the services’;

* employer's liability insurance with a limit of indemnity of not less than five million pounds (£5,000,000) in relation to any one claim or series of claims arising from the provision of the services’; and

* professional indemnity insurance (or equivalent confirmation that the risk can be covered by the organisation) with a limit of indemnity of not less than two million pounds (£2,000,000) in relation to any one claim or series of claims arising from the provision of the services’.

Please confirm the level and details of the insurances your organisation holds below.

|  |  |
| --- | --- |
| **Public Liability Insurance**   |    |
| Insurer   |    |
| Limit of Indemnity   |    |
| Expiry Date   |    |

|  |  |
| --- | --- |
| **Professional Indemnity Insurance**   |      |
| Insurer   |    |
| Limit of Indemnity   |    |
| Expiry Date   |    |

|  |  |
| --- | --- |
| **Employers Insurance**   |    |
| Insurer   |    |
| Limit of Indemnity   |    |
| Expiry Date   |    |

Please see Annex A for the Terms and Conditions that apply to this call.

**If you do not confirm acceptance of the Terms and Conditions above, the Met Office may deem the Bid to be noncompliant and exclude the Bid from the evaluation process.**

I / We offer to supply the goods or services as per: -

☐ the pricing schedule outlined in Section Four,

☐ in accordance with the Specification of Requirements outlined in Section Three,

☐ in accordance with the terms and conditions attached at Annex A

## Declaration

I / We offer to supply the goods or services as per the pricing schedule above, in accordance with the Specification, terms and conditions and all other documents forming the contract.

Signed:

Date:

Name: *(in block capitals)*:

In the capacity of ……………..on behalf of: ………….

*(State official position, i.e. Director, Manager, Secretary etc)*.

Name and postal address:

Telephone No: .............................................................

Company Registration No: ……………………………...

**Annex A: Met Office Terms and Conditions**



**Annex B – Bidder’s Commercial Sensitive Information Form**

|  |
| --- |
| ITT Ref No: |
| Description of Contractor Sensitive Information: |
| Reference(s) of where can be found in ITT response: |
| Explanation of Sensitivity:  |
| Details of potential harm resulting from disclosure: |
| Period of Confidence (if applicable): |
| Contact Details for Transparency/Freedom of Information mattersName:Position:Address:Telephone Number:Email Address: |

\*Bidders should note that the suppliers company details may be released under the FOIA or the EIR, whether successful or unsuccessful at any stage of the tender process. Bidders should be clear throughout the process in stating what information they reasonably consider to be commercially sensitive.

1. [↑](#footnote-ref-2)