**Research specification: To update indicators of climate-related risks and actions in England**

Tender Reference Number: BF/0918

**Specification of Requirements**

Invitation to Tender for research: To update indicators of climate-related risks and actions in England

Tender Reference Number: BF/0918

Deadline for Tender Responses: **5pm on 1st October 2018**

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## Introduction and summary of requirements / Preamble

**Background to the Adaptation Sub-Committee**

The Adaptation Sub-Committee (ASC) of the Committee on Climate Change (CCC) is the government’s statutory adviser on preparing for climate change. Under the Climate Change Act (2008) the ASC has two main roles.

* To provide the government with advice on the UK climate change risk assessment (CCRA).
* To report to Parliament on progress with implementation of the National Adaptation Programme (England only).

To do this the ASC conducts independent analysis into climate change science, economics and policy, and engages with a wide range of organisations and individuals to share evidence and analysis. The CCC and ASC’s past reports are available at <http://www.theccc.org.uk/publications/>.

**The ASC’s assessment framework**

In order to report to Parliament on progress in adapting to climate change in England, the ASC has created an evaluation method based on a two-part framework:

a) **Indicator framework:** assessing trends in indicators of change that relate to climate change risks and adaptation and

b) **Decision making analysis:** the extent to which low-regret adaptation measures are being taken up, and how long-term decisions are accounting for climate change (figure1):



***Figure 1: The ASC’s assessment framework***

The ASC has applied this framework across a number of defined ‘adaptation priorities’ that cover the areas of climate risk set out in the UK Climate Change Risk Assessment. Using the framework to undertake the analysis, the ASC asks three questions in relation to each priority:

1. Is there a plan? (i.e. are there plans that take climate change into account where we would expect to see them?)
2. Are actions taking place? (i.e. are the actions set out in the National Adaptation Programme, and more widely, being delivered?)
3. Is progress being made in managing vulnerability? (i.e. what do our indicators and wider analysis tell us about whether climate risk is being managed adequately?)

The results from applying this framework can be seen in our [2015](https://www.theccc.org.uk/wp-content/uploads/2015/06/6.736_CCC_ASC_Adaptation-Progress-Report_2015_FINAL_WEB_070715_RFS.pdf) and [2017](https://www.theccc.org.uk/wp-content/uploads/2017/06/2017-Report-to-Parliament-Progress-in-preparing-for-climate-change.pdf) reports to Parliament.

This contract relates to updating some of the ASC’s core indicators up to the present day. The ASC’s indicator set is made up of around 150 metrics that measure observed changes through time in the following components of adaptation:

1. *Indicators of risk*. These measure changes in the exposure and vulnerability of a particular sector to the weather. The trends in these indicators in the future will be sensitive to climate change as well as other factors such as changes to society, economic growth and demographic change (for example, the distribution of tree pests and pathogens).
2. *Indicators of adaptation action.* These aim to measure the extent of actions being taken to reduce the risks from climate change (for example, actions to increase water efficiency, or develop flood defences). In particular, the ASC is interested in monitoring the uptake of low-regret adaptation actions.
3. *Indicators of impact.* These track the realised weather-related impacts on the economy, society and environment. The impacts are a net result of the risk factors and the effect of adaptation actions (for example, the cost of crop losses from extreme weather events). These indicators are less useful for the ASC for tracking progress because impacts will vary year to year due to the natural variability in weather, but are still useful as context.

The ASC is required to produce its next progress report on the government’s National Adaptation Programme by the end of June 2019.

## Aims and Objectives

The objective of this project is to update a selection of the ASC’s existing indicator set by undertaking analysis to populate them with more recent data.

The aims of this project are to:

* Provide the ASC with updated indicators (see list below) that show how risks, actions and impacts have changed across a number of different adaptation priorities.
* Provide a narrative on how any data collected relates to previously analysed data and what the implications are for trends in risk and action.
* Provide updated evidence on a selection of other metrics (see list below) where trend information over time is not available, but new studies may have been carried out that provide additional evidence.

##

## Methodology

Bids should set out a methodology for updating the following indicators, including setting out any knowledge that bidders may have on what data will be used, how the underlying datasets or methods have changed since the indicators were last updated, or how they could be improved under this project:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Indicator name** | **Last updated** | **Analysis done by** | **Requires GIS?** |
| 1 | Flooding – Rate of development of residential and non-residential properties in areas at risk of flooding | 2015 | HR Wallingford: <https://www.theccc.org.uk/publication/hr-wallingford-2015-for-the-asc-update-analysis-of-the-number-of-properties-located-in-areas-at-risk-of-flooding-and-coastal-erosion-in-england/>  | Yes |
| 2 | Number of properties lost to coastal erosion  | N/A | Not collected before, would require collation of data from different coastal areas | Possibly |
| 2 | Flooding - Area of impermeable surfacing in urban areas | 2017 | ADAS: <https://www.theccc.org.uk/publication/updated-indicators-of-climate-change-risk-and-adaptation-action-in-england-adas/> | Yes |
| 3 | Flooding – number of warnings issued by type | 2017 | ADAS (see above link) | No |
| 4 | Heat - Number of hot days and/or warm days per year | 2017 | ADAS (see above link) | No |
| 5 | Heat - Number of hospitals/care homes/surgeries that experience overheating or are implementing heatwave plans | N/A | Not collected before but new information may be available in the Estates Returns Information Collection. | No |
| 6 | Heat - Number of heat-related deaths per year | 2017 | ADAS (see above link) | No |
| 7 | Heat and flooding - Area of urban greenspace | 2017  | ADAS (see above link) | Yes |
| 8 | Water - consumption per capita | 2017 | ASC based on Environment Agency data:<https://www.theccc.org.uk/publication/2017-report-to-parliament-progress-in-preparing-for-climate-change/> (p126) | No |
| 9 | Water - leakage | 2017 | ADAS (see above link) | No |
| 10 | Water - % of properties with water meters | 2017 | ASC based on Environment Agency data:<https://www.theccc.org.uk/publication/2017-report-to-parliament-progress-in-preparing-for-climate-change/> (p125) | No |
| 11 | Water – total water demand from agriculture, industry, energy, public water supply, other uses | 2017  | ADAS (see above link) | No |
| 12 | Water – total demand against current and future water scarcity by area | N/A | New indicator – requires GIS overlays of water scarcity maps with demand maps. | Yes |
| 13 | Water - Total annual spend on resilience measures by all water companies | 2017 | ADAS (see above link) | No |
| 14 | Infrastructure - Annual number and length of delays to a) rail d) strategic road network caused by severe weather  | 2017 | ADAS (see above link) | No |
| 15 | Natural environment - Area of agricultural land/ forest converted to development | 2017 | ADAS (see above link) | Yes |
| 16 | Natural environment – change in agricultural area for wheat, maize, potatoes, root crops, barley, grassland – by total area and area in places that are projected to become climatically unsuitable in future | 2017 | ADAS (see above link) | Yes |
| 17 | Natural environment - Incidents of harmful algal blooms | 2017 | ADAS (see above link) | No |
| 18 | Natural environment – change in habitats in favourable condition (terrestrial, freshwater, marine, peatlands) | 2017 | ASC<https://www.theccc.org.uk/publication/2017-report-to-parliament-progress-in-preparing-for-climate-change/> (chapter 3) | No |

In addition to the above list, the project team will also seek to update our evidence base on the following metrics where we know that trend information over a long time period is not available, but new evidence on impacts from specific events or new baseline information may be available:

1. Mental health impacts of flooding
2. Length of time between a flood event and people returning to their homes
3. Number of work or school days lost as a result of severe weather
4. Number of people with chronic respiratory conditions
5. Number of homes with property-level flood protection
6. Sales of air conditioning units, permeable paving, green roofs, water efficient appliances, tinted window film, external shutters
7. Distribution of climate-sensitive pathogens or vectors across England or Europe
8. Agricultural or timber losses from climate-sensitive pests or pathogens
9. Weather-related insurance claims by households, businesses, farmers
10. Number/proportion of businesses with weather-related business continuity plans in place.
11. Economic impacts of hot weather, cold weather, flooding, and drought
12. Number of farms implementing water efficiency measures (e.g. drip irrigation, on-farm reservoirs)
13. Changes in soil health
14. Particulate or other pollution episodes linked to severe weather (e.g. wildfires, hot and dry conditions)
15. Impacts of wildfire

##

## Outputs Required

Three outputs are required from the project:

* An excel spreadsheet for the indicators with one tab per indicator showing the raw data collected, sources, and final outputs. Raw files should also be included for outputs that have been created using GIS or other post-processing so that the ASC can re-create the outputs themselves using suitable software.
* A report outlining the methods, indicator trends, descriptions of the implications of the trends for climate resilience, and a compilation of the latest evidence for the other listed metrics.
* A quality assurance log.

## Ownership and Publication

The results of the analysis and all outputs produced will be owned by and published at the discretion of the Adaptation Sub-Committee.

## Quality Assurance

All research tasks and modelling must be quality assured and documented. Contractors should:

* Include a quality assurance (QA) plan in their bid that they will apply to all of the research tasks.
* Specify in their bid who will take lead responsibility for ensuring quality assurance and ensure that this responsibility rests with an individual not directly involved in the research, analysis or model development.
* Provide a QA log with the final outputs to demonstrate the QA undertaken, including who undertook the QA and the scope, type and level of QA that has been undertaken (e.g. a log entry only stating ‘the data was checked’ will not be sufficient).

Sign-off for the quality assurance must be done by someone of sufficient seniority within the contractor organisation to be able take responsibility for the work done. Acceptance of the work by the CCC will take this into consideration. The CCC reserves the right to refuse to sign off outputs which do not meet the required standard (i.e. contains all of the outputs listed and of the required quality) specified in this invitation to tender.

The successful bidder will be responsible for any work supplied by sub-contractors and should therefore provide assurance that all work in the contract is undertaken in accordance with the quality assurance expectation agreed at the beginning of the project.

For primary research, contractors should be willing to facilitate CCC staff to attend interviews or listen in to telephone surveys as part of the quality assurance process.

The consultant must demonstrate their ability to produce deliverables of quality, in particular following best practice regarding analysis and presentation of results.

## Timetable

An indicative timeline for deliverables is presented below. The contractors can propose modifications to the timeline to better suit their analysis if appropriate, though the final submission date must remain the same. Any proposed modifications should be set out in the bid and will require approval from the ASC secretariat.

| **Phase** | **Deliverable** | **Date** |
| --- | --- | --- |
| Bidding | Bids received | 1st October 2018 |
|  | Interviews conducted (if needed) | w/c 8th October 2018 |
|  | Contract awarded | 12th October 2018 |
|  | Kick-off meeting with ASC  | w/c 15th October 2018 |
| Analysis | Data collection and analysis | October 2018 – February 2019 |
|  | First draft report to ASC for comments | 15th February 2019 |
|  | Comments back from ASC | 22nd February 2019 |
|  | Second draft report to ASC and expert review group for comments | 4th March 2019 |
|  | Comments back from ASC and expert review group | 13th March 2019 |
|  | Final draft report to ASC for minor comments and sign-off | 25th March 2019 |
|  | Comments back from ASC | 29th March 2019 |
|  | Project completed | 1st April 2019 |

# In order to ensure smooth and rapid progress the project plan should allow for regular interactions and meetings where necessary between the contractors and the ASC project team. We would ask bidders to set out when would be appropriate to meet during the project (after the initial kick-off meeting), given the timetable above, and how much flexibility there is to add additional meetings as necessary.

## Challenges

Bids should set out the main risks to carrying out the work and appropriate mitigation measures. Some of the challenges associated with this contract are:

* Extracting data from organisations in a timely manner.
* Interpreting trends where collection methods or metrics have changed over time.
* Finding data that represents the whole of England.
* Coming up with innovative ways to populate indicators
* Obtaining evidence or data that is not published.

## Ethics

All applicants will need to identify and propose arrangements for initial scrutiny and on-going monitoring of ethical issues including the new GDPR rules on use of personal data. The appropriate handling of ethical issues is part of the tender assessment exercise and proposals will be evaluated on this as part of the ‘addressing challenges and risks’ criterion.

We expect contractors to adhere to the following GSR Principles:

1. Sound application and conduct of social research methods and appropriate dissemination and utilisation of findings
2. Participation based on valid consent
3. Enabling participation
4. Avoidance of personal harm
5. Non-disclosure of identity and personal information

## Working Arrangements

The successful contractor will be expected to identify one named point of contract through whom all enquiries can be filtered. An ASC project manager will be assigned to the project and will be the central point of contact.

## Skills and experience

The ASC would like you to demonstrate that you have the experience and capabilities to undertake the project. Your tender response should include a summary of each proposed team member’s experience and capabilities. We expect the project to be managed day-to-day by a senior consultant with at least 15 years’ experience of evaluating or advising on government policy.

Contractors should propose named members of the project team, and include the tasks and responsibilities of each team member. This should be clearly linked to the work programme, indicating the grade/ seniority of staff and number of days allocated to specific tasks.

Contractors should identify the individual(s) who will be responsible for managing the project.

## Consortium Bids

In the case of a consortium tender, only one submission covering all of the partners is required but consortia are advised to make clear the proposed role that each partner will play in performing the contract as per the requirements of the technical specification. We expect the bidder to indicate who in the consortium will be the lead contact for this project, and the organisation and governance associated with the consortia.

Contractors must provide details as to how they will manage any sub-contractors and what percentage of the tendered activity (in terms of monetary value) will be sub-contracted.

If a consortium is not proposing to form a corporate entity, full details of alternative proposed arrangements should be provided. However, please note CCC reserves the right to require a successful consortium to form a single legal entity in accordance with Regulation 28 of the Public Contracts Regulations 2006.

CCC recognises that arrangements in relation to consortia may (within limits) be subject to future change. Potential Providers should therefore respond in the light of the arrangements as currently envisaged. Potential Providers are reminded that any future proposed change in relation to consortia must be notified to CCC so that it can make a further assessment by applying the selection criteria to the new information provided.

## Budget

**The budget for this project is up to £40,000 not including VAT (£48,000 including VAT).**

Contractors should provide a full and detailed breakdown of costs (including options where appropriate). This MUST include the funding allocated by each task as well as by person. Please include the number of days in the unpriced bid.

Cost will be a criterion against which bids which will be assessed.

Payments will be linked to delivery of key milestones. The indicative milestones and phasing of payments can be adjusted and agreed with the contractor and Project Manager. Please advise in your tender response how this breakdown reflects your usual payment processes.

In submitting full tenders, contractors confirm in writing that the price offered will be held for a minimum of 60 calendar days from the date of submission. Any payment conditions applicable to the prime contractor must also be replicated with sub-contractors.

The CCC aims to pay all correctly submitted invoices as soon as possible with a target of 10 days from the date of receipt and within 30 days at the latest in line with standard terms and conditions of contract.

## Evaluation of Tenders

Contractors are invited to submit full tenders of no more than 20 pages, excluding declarations. Tenders will be evaluated by at least three reviewers.

The ASC will select the bidder that scores highest against the criteria and weighting listed below, see the ITT for further information.

**EVALUATION CRITERIA AND SCORING METHODOLOGY**

|  |  |  |
| --- | --- | --- |
| Criterion | Description | Weighting |
| 1 | **RELEVANT EXPERIENCE / DEMONSTRATION OF CAPABILITY OF THE PROPOSED PROJECT TEAM** | 30% |
| 2 | **QUALITY ASSURING THE SERVICES YOU PROVIDE** | 10% |
| 3 | **MANAGEMENT STRUCTURE AND MANAGING RELATIONSHIP WITH THE CCC** | 10% |
| 4 | **METHOD** | 30% |
| 5 | **UNDERSTANDING OF REQUIREMENTS** | 10% |
| 6 | **RISK AND CHALLENGES** | 10% |
|  |  |  |
|  | 100% |

## Scoring Method

Tenders will be scored against each of the criteria above, according to the extent to which they meet the requirements of the tender. The meaning of each score is outlined in the table below.

The total score will be calculated by applying the weighting set against each criterion, outlined above; the maximum number of marks possible will be 100. Should any contractor score 1 in any of the criteria, they will be excluded from the tender competition.

|  |  |
| --- | --- |
| **Score** | **Description** |
| 1 | Not Satisfactory: Proposal contains significant shortcomings and does not meet the required standard |
| 2 | Partially Satisfactory: Proposal partially meets the required standard, with one or more moderate weaknesses or gaps  |
| 3 | Satisfactory: Proposal mostly meets the required standard, with one or more minor weaknesses or gaps. |
| 4 | Good: Proposal meets the required standard, with moderate levels of assurance |
| 5 | Excellent: Proposal fully meets the required standard with high levels of assurance |

## Structure of Tenders

Contractors are strongly advised to structure their tender submissions to cover each of the criteria above and supply a price schedule specifying the daily rates (ex-VAT) you will charge for each level of your staff.

## Evaluation for Interviews, if held

CCC reserves the right to award the contract based on applicants’ written evaluation only if one candidate emerges from the evaluation stage as significantly stronger than the others.

Should interviews go ahead, they are provisionally expected to be held on the week commencing **8th October 2018**. If this date changes, the ASC will notify applicants.

The areas to be covered in the interview will be sent to the shortlisted supplier prior to interview.

Further details of interviews will be sent to successful applicants on selection.

## Feedback

Feedback will be given by email.