**Specification for: Residential Archetypes Dataset**

**Tender Reference Number: SR-0923**

# Specification of Requirements

Specification for Residential Archetypes Dataset

Tender Reference Number: SR-0923

Deadline for Tender Responses: 17:00, 12th October 2023

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# Preamble

The Climate Change Committee (CCC) is an independent, statutory body established under the Climate Change Act 2008. We advise the UK and devolved governments on emissions targets, including setting the five-yearly carbon budgets. We also have a duty to assess the UK and devolved governments’ progress on climate goals and make reports to Parliament. This work covers both reducing greenhouse gas emissions and preparing for and adapting to the impacts of climate change.

# Background

We are currently preparing our advice for the Seventh Carbon Budget (CB7) and the Fourth Climate Change Risk Assessment (CCRA4), both due in 2025.

* CB7 will set a limit on the UK’s territorial emissions over the years 2038 to 2042. Our advice will inform what that level should be; and the budget will then be voted on by Parliament to give it the force of law. At the core of our advice will be a pathway for UK emissions from now to 2050, based on modelling of realistic abatement strategies across the economy.
* CCRA4 will provide an update of the priority risks and opportunities for the UK as it experiences the effects of a changing climate today and in the years to come. It will set out how these risks are linked across society and the benefits of actions that can be taken to reduce these risks. Our independent advice will provide priority actions for the Government and others to build resilience in the UK.

Buildings are an important sector in both reports; they account for 17% of direct emissions in the UK and face risks from a changing climate, such as flooding and overheating.

To inform our work we intend to build models which enable us to generate credible pathways for eliminating emissions from homes and assess the scope for adapting homes to a changing climate.

We require a contractor to produce the archetypes dataset to be used in these models. This dataset will be a key input into our models and will need to provide a valid representation of the UK’s 28 million existing homes.

# Aims and Objectives

We require a dataset which accurately represents the UK’s housing stock. The dataset should capture the key characteristics of the housing stock which impact on the choice of measures used to eliminate emissions from homes and adapt them to climate change. The housing stock should be represented as archetypes – groups of houses in the stock with near-identical sets of characteristics.

The dataset will represent the housing stock using a range of variables. Most of these will be categorical variables, with a fixed set of possible attributes. Some will be continuous variables. Each archetype is a unique combination of attributes.

The dataset should include a wide range of variables to enable the capture of characteristics of the following types:

* Physical characteristics of homes such as typology, levels of insulation, and heating system type.
* Geographic characteristics of homes such as location (by region), proximity to hydrogen sources, and suitability for heat networks.
* Dependent variables such as average floor area, energy demand, and stock size/population.

A list of the essential dependent variables is provided in Table 1 below. A list of essential categorical variables is provided in Table 2. A list of further ‘desirable variables’ is provided in Table 3. We invite bidders to explore whether the desirable variables can be incorporated into the dataset, and consider any difficulties in obtaining the necessary data and mapping it to other attributes.

We have provided indicative lists of potential attributes for each variable. We invite bidders to suggest final lists of attributes according to the availability of data and the ability to make credible estimates of their distribution.

The number of archetypes must be sufficient to capture the variety of the housing stock and allow the selection of combinations of energy efficiency, heating and adaptation measures which reflect this variety. We would expect this number to be in the order of several thousand archetypes. A minimum population size for an allowable archetype should be established, to limit the number of archetypes and ensure that the calculated populations of archetypes are statistically valid.

An essential aspect of the dataset will be the identification of archetypes whose location offers the potential for access to a future hydrogen grid and future low-carbon heat networks, and the population size of these archetypes. Further details are given in the methodology section below.

The dataset should accurately represent the housing stock throughout the UK and within each Devolved Administration. The archetypes should be based as far as possible on robust, high-quality surveys of the UK’s housing stock, such as the English Housing Survey and equivalents. Other data sources may be used to populate further variables, using robust methods for mapping additional attributes to attribute combinations.

The ‘essential elements’ of the project consist of all of the requirements of the project except the ‘desirable variables’.

# Methodology

The methods which we expect will need to be used to generate the dataset are outlined below.

Bidders should provide full details of each step of their proposed methodology for producing the dataset. Bidders may suggest deviating from the methods below and should explain the advantages and disadvantages of doing so.

## Archetype taxonomy and generation

We anticipate that archetypes will be defined at three levels, with each level consisting of subdivisions of the archetypes in the level above, as follows:

* Basic archetypes: Groups of houses in the stock with near-identical building fabric attribute combinations including typology, size, insulation levels to walls, floors, and roofs.
* Energy archetypes: Sub-divisions of the basic archetypes according to differing combinations of heating system and regional location, which together define energy demand.
* Final archetypes: Sub-divisions of the energy archetypes according to combinations of a range of other attributes such as heritage status, tenure, heat network accessibility.

The use of these levels should support logical steps in the process of generating the dataset; assist with quality assurance of the data; and support comparisons of modelling outcomes between regions.

The final archetypes are likely to be produced through an iterative process of generating sub-divisions using an increasing number of variables. There may be multiple sets of final archetypes, depending on the combinations of variables used. A decarbonisation model final archetype dataset should be provided which includes all of the ‘essential variables’ required for the residential buildings decarbonisation model. In producing the ‘desirable variables’ it may make sense (in terms of the validity and practicality of the methods used) to apply these by sub-dividing a less granular set of archetypes and thus produce additional datasets suited only for other modelling uses, such as in adaptation models.

## Data sources

We expect that much of the data required will be drawn from the English Housing Survey (EHS), Scottish House Condition Survey (SHCS), Welsh Housing Conditions Survey (WHCS) and Northern Ireland House Condition Survey (NIHCS).

These datasets are typically updated yearly, although some have not been updated recently. The years to be used should be agreed with the CCC at an appropriate stage in the project.

A method should be developed to deal with differences in the available variables and attributes in the different datasets, resulting in a consistent set of variables and allowable attributes.

Other data sources are likely to include the following, for each of the UK nations:

* EPC databases
* Fuel poverty datasets
* Databases of heritage assets

## Energy demand

The energy demand figures for associated with each archetype will require calibrating so that the aggregate energy demand of the archetypes in each UK nation aligns with the relevant fuel consumption in ECUK and relevant emissions in the National Atmospheric Emissions Inventory (allowing for temperature adjustment).

## Geographic distribution

As the archetypes are developed, an understanding of their geographic distribution will be necessary. This will be required to populate variables for access to heat networks and hydrogen, and may also be necessary for populating other variables, where the best way of determining attributes is to use geographic data (such as fuel poverty).

## Future access to low-carbon heat networks

A method will be required for identifying final archetypes which will be suitable for connection to future low-carbon heat networks, by mapping the geographical distribution of sub-divisions to the locations of future heat networks. The areas where future heat networks will be accessible should be determined using outputs from the DESNZ National Comprehensive Assessment model (access to this data will be facilitated by the CCC). The aggregate heat demand of the final archetypes allocated to heat networks should align with the total heat supplied to residential buildings in the National Comprehensive Assessment model.

## Future access to hydrogen

A method will be required for identifying final archetypes which are suited to using hydrogen and in locations which would be most likely to be connected to a hydrogen grid in the event of a limited use of hydrogen for home heating. These will be areas with large numbers of high-density houses and low-rise flats (but not high-rise flats), in large towns and cities closest to future hydrogen production/storage or transmission pipelines linking production and storage. This will require mapping the geographical distribution of sub-divisions to areas which meet these criteria. The locations of future hydrogen production, storage and pipelines will be determined using outputs from the NIC and/or the CCC’s industry sector models.

## Archetype population size

A systematic method will be required for merging archetypes with populations below a certain threshold, to limit the total number of archetypes (to a number to be agreed).

The method should identify preferences and rules for merging archetypes, such as by calculating the level of similarity between archetypes, or establishing a hierarchy of attributes whose values can be merged.

The method should identify attributes for which the merging of archetypes is not permitted (e.g. region).

## Table 1: Dependent variables

Each archetype will have a set of dependent variables associated with it, which will include space heating demand, hot water demand, stock size, and others. These need to be derived in a consistent way for all archetypes. For clarity and transparency, it may be useful to incorporate figures for heating system efficiency and both useful energy (space heating demand) and delivered energy (fuel demand). Direct GHG emissions may be calculated as part of calibrating the energy demands to the NAEI, so these figures could be included in the dataset for transparency. Energy and emissions figures should be temperature-adjusted using a method agreed with the CCC.

|  |  |
| --- | --- |
| **Variable** | **Description** |
| Annual space heating demand | Essential: The average total annual energy demand for space heating (kWh/yr). |
| Annual hot water demand | Essential: The average total energy demand for hot water (kWh/yr). |
| Other annual combustion fuel demand | Preferable: Estimate of the average total annual energy demand for other (i.e., ‘unregulated’) uses (kWh/yr). |
| Lighting annual electricity demand | Preferable: Estimate of the average total electricity demand for lighting (kWh/yr). |
| Other annual electricity demand | Preferable: Estimate of the average total electricity demand for other (i.e., ‘unregulated’) uses (kWh/yr). |
| Direct CO2 emissions | Preferable: Direct emissions of CO2 from fuel combustion (tonnes/yr). |
| Direct N2O emissions | Preferable: Direct emissions of N2O from fuel combustion (tonnes/yr). |
| Direct CH4 emissions | Preferable: Direct emissions of CH4 from fuel combustion (tonnes/yr). |
| Floor area | Essential: The average floor area for the archetype (m2). |
| Stock | Essential: The number of properties matching the archetype. |

## Table 2: Essential variables

|  |  |
| --- | --- |
| **Variable** | **Description** |
| Nation | The UK nation in which an archetype is located.  Attributes: England, Scotland, Wales, Northern Ireland. |
| Region | The region within a UK nation in which an archetype is located. This will provide a finer spatial resolution in order to allow for variations in climate (and resulting variation in heat demand), and enable our analysis to incorporate differing policy solutions by location. There are a number of statistical geographies which may suit these purposes, such as the regions in SAP Appendix ‘U’, [NUTS1 regions](https://en.wikipedia.org/wiki/ITL_1_statistical_regions_of_England), or the [Met Office’s regional climates](https://www.metoffice.gov.uk/research/climate/maps-and-data/regional-climates/index).  Attributes: To be agreed. |
| Property type | The typology of the archetype. The attributes used will depend on the data available in the housing surveys and other data sources used to build the dataset. The attributes used should differentiate typological variations in the stock with meaningful impacts on heating demand and the choices of technologies which can be applied. If possible it would be useful to be able to differentiate high-rise and low-rise flats, and top floor and basement flats.  Potential attributes: End terrace, Mid terrace, Semi-detached, Detached, Bungalow, Flat, High-rise flat, Basement flat, Top-floor flat. |
| Property size | A qualitative indicator of the average floor area of the archetype, aligned to the sizes used in the decarbonisation model’s energy efficiency costs and energy savings inputs. The size ranges which correspond to each attribute are to be agreed.  Probable attributes: Small, Medium, Large. |
| Age band | The range of years in which the archetype was constructed. Some bands in the survey data may be merged to limit the number of archetypes.  Potential attributes: Pre-1919, 1919-44, 1945-64, 1965-80, 1981-90, 1983-2002, post 2002 |
| Wall type | The current construction of the walls of the archetype, indicating the current levels of insulation, difficulty of making improvements, and potentially preferred choice of improvement (e.g. whether a solid-walled property is suited to internal or external wall insulation).  Potential attributes: Solid insulated, Solid uninsulated (external), Solid uninsulated (internal), Cavity insulated, Cavity uninsulated, Cavity uninsulated HTT. |
| Roof type | The current construction of the roof of the archetype, indicating the current levels of insulation and difficulty of making improvements.  Potential attributes: Uninsulated (Easy to Treat), Uninsulated (Hard to Treat), Under-insulated (Easy to Treat), Under-insulated (Hard-to-Treat), Insulated, No roof. |
| Glazing type | The current type of windows fitted to the property. This variable may be omitted from the final dataset if changes to windows are excluded from the decarbonisation model.  Potential attributes: Single glazed, Double glazed pre 2002, Double glazed post 2002. |
| Floor type | The current construction of the ground floor of the archetype, indicating the current levels of insulation and difficulty of making improvements.  Potential attributes: Solid uninsulated, Solid insulated, Suspended uninsulated, Suspended insulated, None |
| Heating type | The current space heating system installed in the archetype.  Potential attributes: Gas boiler, Oil boiler, Electric (resistive), Electric (storage), Communal heating (gas), Communal heating (oil), Communal heating (electric), Heat pump, Heat network (gas), Heat network (electric), Biofuels, Waste, Other |
| Hot water tank | The presence of a hot water tank in the archetype.  Attributes: Yes, No. |
| Tenure | The tenure type under which the archetype is occupied.  Probable attributes: Social, Private, Owner-occupied |
| Fuel poverty | Whether the households occupying the archetype are currently in fuel poverty. Subject to agreement, and depending on data availability this variable might be used to capture whether the household has a low income rather than specifically meeting the criteria for fuel poverty.  Probable attributes: Yes, No. |
| Heritage status\* | Whether the archetype is a designated heritage asset (is listed or within a Conservation Area).  Probable attributes: Yes, No. |
| Space constrained\* | Whether the archetype has limited internal space, and thus unsuitable for certain measures. This is likely to be defined as those archetypes where the available floor area per habitable room, bedroom, or estimated number of occupant is below a certain threshold.  Probable attributes: Yes, No. |
| DH eligibility | Whether an archetype is allocated for connection to a low-carbon heat network. The areas where future heat networks will be accessible should be determined using outputs from the DESNZ National Comprehensive Assessment model. The aggregate heat demand of the final archetypes allocated to heat networks should align with the total heat supplied to residential buildings in the National Comprehensive Assessment model. Archetypes could be sub-divided using more attributes based on the expected costs of the allocated heat network.  Probable attributes: Yes, No. |
| H2 eligibility | Whether an archetype has access to hydrogen in the event of a limited use of hydrogen for home heating. This will be in areas with large numbers of high-density houses and low-rise flats, in large towns and cities closest to future hydrogen production/storage or close to transmission pipelines linking production and storage.  Probable attributes: Yes, No. |
| Outdoor space | Whether an archetype has any external space and its characteristics. The availability of external space impacts on the suitability of low-carbon heating solutions and the ability of occupants to deal with overheating. The nature of the open space can impact on overheating risks, and in aggregate impacts on urban temperatures. The attributes used will depend on the data available and which of these impacts it is feasible to capture.  Potential attributes: Garden (soft landscaped), Garden (hard landscaped), Roof terrace, Balcony. |
| Location type | The type of location in which the archetype is situated. At a minimum this should distinguish between urban and rural locations. It may be useful to provide additional resolution, distinguishing between different settlement types, if data is available.  Probable attributes: Urban, Rural.  Potential attributes: Large town, Small town, Village, Rural |

\*In the Sixth Carbon Budget these variables had multiple attributes. These were used to simplify modelling of deploying measures to a particular proportion of an energy archetype, by sub-dividing its population into pre-determined fractions. This approach will not be used in the Seventh Carbon Budget model.

## Table 3: Desirable variables

Bidders should consider ways to incorporate the following desirable variables. For each of these variables the bidder should indicate how they would obtain suitable data and incorporate it into the datasets, and if and how they would recommend doing so.

|  |  |
| --- | --- |
| **Variable** | **Description** |
| Cooling | Whether the archetype has an active cooling system installed. This variable should only be included if suitable data exists and there is a statistically significant level of active cooling in the stock and it is possible to estimate its distribution across the stock in a valid way.  Probable attributes: Yes, No. |
| Aspect | Whether the archetype is single or multiple aspect. This impacts on whether cross-ventilation is possible, which impacts on overheating risk.  Probable attributes: Single, Multiple |
| Overheating risk | An indicator of the level of risk of overheating for the archetype. This may be derived from other variables such as region, property type, and aspect. The risk could be indicated using an ordinal attribute, and the variable might require sub-dividing archetypes based on a percentage of the archetype expected to be at risk.  Possible attributes: High, Medium, Low |
| Cooling demand | An estimate of the annual energy demand for cooling if active cooling was installed in the property (under current climatic conditions, or other conditions to be agreed). This may be derived from other variables such as floor area, region, property type, and aspect.  Probable attributes: kWh/yr |
| Extract ventilation | Whether the archetype has mechanical ventilation fitted in the kitchen and/or all rooms containing a shower or bath. This has important impacts on indoor air quality.  Probable attributes: Kitchen/bathrooms, Kitchen only, Bathrooms only, None. |
| External shading | Whether the archetype has external shading such as shutters, awnings, external blinds, or brise soleil.  Probable attributes: Yes/no |
| Basement | Whether the archetype has a basement, or is a basement flat. This impacts on flood risk.  Probable attributes: Basement flat, Basement, No basement. |
| Flood risk | An indicator of the level of risk of flooding of the archetype. This may be derived from archetype characteristics such as location type and basement. It may also be possible to assess this risk spatially using national flood risk zone mapping. However, the high resolution of flood risk maps may mean that flood risk can only be applied to archetypes defined by a limited number of other characteristics. This variable could be split into two, to separate surface water and river/sea flooding.  Probable attributes: High, Medium, Low, Very low. |
| Parking | What type of parking the archetype has available. For this variable to be useful it would need to be used to sub-divide the archetypes in the decarbonisation dataset, or a variant of the dataset with certain variables omitted.  Probable attributes: Driveway, Allocated, On-street, None. |

We invite the contractor to propose other useful variables where they are confident that they can accurately quantify a set of related attributes.

# Outputs Required

The outputs provided should include those listed below. The outputs should incorporate all of the essential variables, and any desirable variables agreed prior to commencing or during the contract:

* An Excel workbook containing the decarbonisation model final archetype dataset as a worksheet of hard-coded data (ready for use as a model input), further worksheets for other final archetype datasets (defined using differing combinations of variables for different purposes), along with additional worksheets containing metadata and notes as necessary.
* A data dictionary defining every variable in the dataset, including the sources of the data, key assumptions and methods used, and definitions of attribute values. This could be included in the workbook described above.
* An Excel workbook (or other output as agreed) containing the final archetype datasets prior to any merging of archetypes and a usable tool for merging archetypes, which allows the process used to generate the final archetypes to be reproduced and altered by the CCC.
* Other tools for processing and manipulating the data which the contractor wishes to provide.
* Summary statistics and charts showing aggregated quantities of physical attributes of the archetypes and comparing these to reliable equivalent national statistics.
* Statistics and charts analysing the population distribution of archetypes.
* Statistics and charts showing the population of archetypes split by attributes including region, tenure, fuel poverty, and heritage status, and comparing these to reliable equivalent national statistics.
* Detailed documentation explaining how to use any data processing tools provided as part of the outputs, and enabling the methodology to be reproduced/validated, by explaining each step in the generation of the dataset and the sources of data and processing undertaken.
* Identification of any known issues with the methodology and outputs, the reasons for and implications of these issues.
* Clear, detailed records of quality assurance procedures undertaken.
* Draft versions of outputs at suitable stages of the project to enable review and comment by the CCC.
* Delivery of a presentation explaining the outputs, methodology, data sources, and how to use any data processing tools provided.

# Ownership and Publication

The key deliverables will be handed over to the CCC, who may choose to publish these as supporting evidence on their website. Excel workbooks should be unrestricted, and the CCC should have full access to all models and analysis to enable full QA of results and assumptions.

# Quality Assurance

All research tasks and modelling must be quality assured and documented.

Contractors should:

* Include a quality assurance (QA) plan that they will apply to the modelling.
* Specify who will take lead responsibility for ensuring quality assurance. This responsibility should rest with an individual not directly involved in the research or analysis.
* Provide a QA log to demonstrate the QA undertaken, which must identify who undertook the QA and the scope, type, and level of QA that has been undertaken.
* Sign-off for the quality assurance must be done by someone of sufficient seniority within the contractor organisation to be able to 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 specified in this invitation to tender.
* The successful tenderer will be responsible for any work supplied by sub-contractors and should therefore provide assurance that all work in the contact is undertaken in accordance with the quality assurance expectation agreed at the beginning of the project.

The CCC expects that:

* Analysis must be delivered in a simple, transparent Excel spreadsheet or set of spreadsheets, where key assumptions (agreed with the CCC) are clearly stated. All assumptions and figures should be adequately referenced, and include any supporting workings. Any such spreadsheets will be the property of the CCC.
* Existing analysis and published research should be reviewed and considered in developing the scenarios and approaches to be analysed within this assignment.

# Timetable

The final outputs from the project are required for use in the CCC’s analysis no later than the 22nd January 2023.

A suggested timetable for delivering the project is set out below. The bidder should include a proposed timetable for the project as part of their tender submission. The CCC is willing to be flexible and will consider alternative timetable proposals.

|  |  |
| --- | --- |
| **Date (w/c)** | **Action/deliverable** |
| 30/10/23 | Commence project |
| 13/11/23 | Agree final methodology and data sources |
| 20/11/23 | Confirm access has been obtained to required datasets |
| 04/12/23 | Provide initial outputs for review and comment |
| 18/12/23 | Provide final outputs |

In addition to the formal reporting points, the CCC would expect to have regular scheduled discussions (weekly meetings or calls) to ensure the work is progressing as expected.

# Challenges

Bidders should highlight any challenges or risks that they envisage in delivering any outputs of the project, whether in terms of scope of the work, resources, or timelines. Alternative suggestions will be considered if the risks are such that the aspects of the project as proposed are unlikely to be deliverable.

# Working Arrangements

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

The CCC would expect the choice of variables and attributes, methodological approaches and underlying assumptions to be developed through a collaborative process and as such expect regular contact and check-ins with the contractor.

# Skills and experience

The CCC 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.

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 meeting the ‘essential elements’ of the project (all of the requirements of the project except the ‘desirable variables’) is £34,000 to £67,000 excluding VAT.

Bidders should provide additional itemised prices for each of the ‘desirable variables’ (including any costs associated with incorporating them into all the required outputs). The choice of ‘desirable variables’ to be incorporated into the project, and thus the total cost of the project, will be agreed prior to commencing the contract.

Contractors should provide a full and detailed breakdown of costs (including options where appropriate). This should include staff (and day rate) allocated to specific tasks.

Price will be a criterion against which bids which will be assessed. The assessment will be made against the price quoted for the ‘essential elements’ of the project. The affordability of the ‘desirable variables’ may also be a consideration in assessing bids (see below).

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 Committee on Climate Change 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 and CV’s. Tenders will be evaluated by at least three CCC staff.

CCC 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** | **Weighted marks** |
| 1 | Relevant experience / demonstration of capability | 15 |
| 2 | Managing your relationship with the CCC | 5 |
| 3 | Quality assuring the services you provide | 10 |
| 4 | Management structure | 5 |
| 5 | Project team – skills and knowledge | 5 |
| 6 | Method, ability and technical capacity | 35 |
| 6a | Methods for and affordability of desirable variables (optional) | (10) |
| 7 | Understanding of requirements | 15 |
| 8 | Risk and challenges | 10 |
| Price | Proportionate price score | 20 |
| **Total marks available** | | **120 (130)** |

## 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.

During the evaluation of bidders’ proposals the CCC will decide which desirable variables should be included in the contract. The CCC will have the option, at its discretion, of including a score for the methods proposed for these variables and their affordability when evaluating bids.

|  |  |
| --- | --- |
| **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 |

## Scoring for Pricing Evaluation

The total price the ‘essential elements’ of the project (all of the requirements of the project except the ‘desirable variables’) will be marked using proportionate scoring. Each bid will be scored according to how it compares to the lowest bid received, using the following formula:

Score = Bid Price / Lowest Bid Price x Marks Available

An example of the scoring method is set out below:

|  |  |  |
| --- | --- | --- |
| **Bidder** | **Price** | **Marks** |
| 1 (lowest bid) | £50,000 | 20 |
| 2 | £60,000 | 50/60 \* 20 = 16.7 |
| 3 | £75,000 | 50/75 \* 20 = 13.3 |

## Structure of Tenders

Bidders 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.

## Interviews

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

Should interviews go ahead, CCC will shortlist the top three bidders with the highest marks from the written submissions. Interviews are provisionally expected to be held on w/c 16th October. If this date changes, the CCC will notify bidders.

The areas to be covered in the interview, and markings allocated to each topic area will be sent to the shortlisted bidder prior to interview.

Further details of interviews will be sent to shortlisted bidders on selection.

## Feedback

Feedback will be given in the unsuccessful letters or emails.