**Technical and Commercial Evaluation of SEM-EDX Analysis of Caesium Particles: Guidance Document**

All Tenderers should be aware of the timescales set to deliver this requirement and only submit a response where they are fully confident of being able to deliver within these parameters.

If the Tenderer passes the technical stage, the commercial stage will be evaluated. The technical stage is worth 70% and the commercial stage is worth 30%. Tenderers should submit their technical and commercial response to [Adam.Lang@defra.gov.uk](mailto:Adam.Lang@defra.gov.uk).

**Technical questionnaire**

**Weighting, page limits, and scoring for each question**

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| --- | --- | --- |
| **Question** | **Weighting as a proportion of score for technical questionnaire** | **Maximum number of sides of A4** |
| E01 Methodology | 60% | 2 |
| E02 Project Timetable | 40% | 1 |

**Technical Questions**

**E01 Methodology (Weighting: 60%)**

Please detail your methodology to meet the project deliverables detailed in the Invitation for Quotation. Any input required from the Authority should be outlined. Further information is available in the Invitation for Quotation.

**Your response must be a maximum of 2 sides of A4, font size 12.** Any responses exceeding 2 sides of A4 will not be evaluated beyond the last page. Please submit a document with the filename: “E01\_Your Company Name”.

Your response must include the following:

* An outline of how you will locate and prioritise caesium (Cs) particles for characterisation in the 30 samples provided.
* An outline of how you will determine the elemental composition of Cs particles in the 30 samples provided.
* The average instrument time you will dedicate to each sample. Due to the likely heterogenous nature of the samples (in terms of Cs abundance), it is acceptable for Tenderers to express this time value as an indicative range.

**It is strongly recommended that Tenderers consider the following points when preparing their methodology:**

* Variation in Cs particle abundance is expected across the 30 samples. Samples of high Cs concentration may require shorter instrument times (to locate relevant particles) than samples of low Cs concentration**.**
* A maximum of ten (10) SEM images of Cs containing particles are required for each sample. Individual SEM images which capture multiple Cs particles to a high resolution are desirable, where practically feasible.
* Average Cs particle size is expected to be approximately 10 µm.
* EDX spot analysis should be used to quantify the chemical composition of Cs particles. Results must be expressed as atomic concentrations (atomic %).
* One (1) set of EDX elemental maps is required per sample. It is expected that Cs and chlorine (Cl) are the two major elements in all particles. Minor constituents may include carbon (C), oxygen (O), aluminium (Al), silicon (Si), and titanium (Ti).
* Where possible, Cs particles enriched with minor elements should be prioritised (over “pure” CsCl particles) for elemental mapping characterisation.
* Defra recognises that C and O may be present as ubiquitous contamination and it may not be possible to reliably quantify their presence in Cs bearing particles.

**E02 Project Timetable (Weighting: 40%)**

Please provide details of the proposed project timetable as a Gantt chart (or similar).

**Your response must be a maximum of 1 side of A4, font size 12**. Any responses exceeding 1 side of A4 will not be evaluated beyond the last page. Please submit a document with the filename: ‘E02\_Your Company Name’.

Your response must include the following:

* A Gantt chart (or similar) illustrating the proposed project timetable. This should include milestones and occasions where Defra input would be required.

**Technical Evaluation Scoring Criteria (for information)**

**Technical Questions E01 - E02 will be scored using the following criteria:**

* **For a score of 100:** Excellent - Response is completely relevant and excellent overall. The response is comprehensive, unambiguous, and demonstrates a thorough understanding of the requirement and provides details of how the requirement will be met in full providing additional added value.
* **For a score of 70:** Good - Response is relevant and good. The response demonstrates a good understanding and provides details on how the requirements will be fulfilled.
* **For a score of 50:** Acceptable - Response is relevant and acceptable. The response provides sufficient evidence to fulfil basic requirements.
* **For a score of 20:** Poor - Response is partially relevant and/or poor. The response addresses some elements of the requirements but contains insufficient / limited detail or explanation to demonstrate how the requirement will be fulfilled.
* **For a score of 0:** Unacceptable - Nil or inadequate response. Fails to demonstrate an ability to meet the requirement.

**Commercial Evaluation Scoring Criteria (for information)**

Tenderers will be required to submit a total fixed cost for completion of the project and include a breakdown of costs by milestone. The milestones associated with this project are outlined in the Invitation for Quotation (Section: Key Timescales). Costs will need to be reasonable and competitive and offer value for money. Please submit a document with the filename: “F01\_Your Company Name”.

**Tender Price**

The calculation used for the commercial evaluation is the following:

Score = Lowest Tender Price x 30% Maximum available marks

For example, if three Tender Responses are received and Tenderer A has quoted £3,000 as their total price, Tenderer B has quoted £5,000 and Tenderer C has quoted £6,000 then the calculation will be as follows:

Tenderer A Score = £3000/£3000 x 30% (Maximum available marks) = 30%

Tenderer B Score = £3000/£5000 x 30% (Maximum available marks) = 18%

Tenderer C Score = £3000/£6000 x 30% (Maximum available marks) = 15%