

Pre-Tender Market Engagement

Evaluating Pride in Place Using Natural Language Processing CPD4124172

Authority: Department for Levelling Up, Housing and Communities (DLUHC) ("the

Authority).

Date Response required: 12:00 (GMT) 11th January 2023

1 PURPOSE

- 1.1 This Pre-Tender Market Engagement (PTME) seeks information in preparation for the potential procurement of a Supplier (from herein referred to as a "Potential Supplier") to help develop natural language processing models. The model will aim to explore and measure "Pride in Place" metrics as outlined in the Levelling Up White Paper. The purpose of this PTME is to:
 - 1.1.1 help define the requirement;
 - 1.1.2 help provide a better understanding of the feasibility of the requirement;
 - 1.1.3 understand the best approach;
 - 1.1.4 understand the capacity of the market to deliver and possible risks involved; and
 - 1.1.5 provide the market with an opportunity to ask questions, raise queries and any issues to be addressed at an early stage
 - 1.1.6 understand data availability and access
 - 1.1.7 understand the best methodology to use for natural language processing in the context
- 1.2 The Authority shall maintain commercial confidentiality of information received during the PTME.

2 INTRODUCTION

- 2.1 The <u>Technical Annex of the Levelling Up White Paper</u> sets out the UK Government's plans to improve the way we measure the pride in place mission. The Levelling Up White Paper includes a commitment to undertake further work to supplement existing data on pride in place at a subnational level across the UK.
- 2.2 Government intervention to improve the collection, production, availability, and analysis of subnational data is essential both in driving progress in the levelling up agenda and in measuring and evaluating its success.
- 2.3 DLUHC has established a Spatial Data Unit to support the delivery of levelling up by transforming the way the UK Government gathers, stores, and manipulates UK-wide subnational data.
- 2.4 The metrics to measure and evaluate progress against the pride in place mission need careful design and development.
- 2.5 DLUHC is exploring survey-based techniques to measure this mission but alternative approaches would be preferable due to the high-cost of obtaining local authority level estimates of pride and local area satisfaction.
- 2.6 In parallel, the Spatial Data Unit wishes to explore the use of novel data sources to measure the pride in place mission of the Levelling Up White Paper across the UK.

2.7 This project proposes: producing and evaluating UK-wide subnational measures of pride in place, from 3 novel sources of data: (a) social network media data, (b) local news articles, and (c) civic engagement exercises (e.g. public consultations and digital engagement).

3 HIGH LEVEL OUTLINE PROJECT OUTCOMES REQUIRED

- 3.1 The Spatial Data Unit is planning to use Natural Language Processing (NLP) techniques on novel data sources to explore understanding and measuring sentiment around the Pride in Place mission metrics.
- 3.2 The project has the following objectives:
 - 3.2.1 Produce indicators for measuring the Pride in Place levelling up mission.
 - 3.2.2 Empower policy teams through access to new spatial data, statistics and analysis to inform decision making and increase accountability.
 - 3.2.3 Improve data science, standards and sharing capabilities within DLUHC and across government.
- 3.3 Support for people and communities to understand what Pride in Place means to them at the local level. Identifying features of Pride in Place that have room for improvement.

4 Social Value

- 4.1 The Government must take account of Social Value in all of its procurement exercises. This means more explicitly considering how a proposed contract might secure relevant and proportionate wider social, economic and environmental benefits. Those benefits are currently grouped into the following themes and outcomes:
 - a) Covid-19 recovery (helping local communities to manage and recover from the impact of covid-19, facilitating job creation or re-training).
 - b) Tackling economic inequality (creating new businesses, jobs and skills, and increasing supply chain resilience and capacity) e.g., employment, training and work experience opportunities for local people.
 - c) Fighting climate change (effective stewardship of the environment) e.g. local staff, local suppliers and local work reducing your carbon footprint.
 - d) Equal opportunity (tackling workforce inequality and reducing the disability employment gap risk of Modern slavery).
 - e) Wellbeing (improving health and wellbeing, as well as community integration) e.g., supporting local community initiatives such as charities, local amateur sports teams etc.
- 4.2 Of the Social Value policy themes set out in the <u>Quick Reference Table</u>, the Authority considers the following policy areas as the most relevant to this contract and the Supplier will be required to deliver social benefits related to them under the Contract:
- 4.3 **Theme 2: Tackling economic inequality**, Policy outcome: Increase supply chain resilience and capacity.
 - 4.3.1 MAC 3.2: Support innovation and disruptive technologies throughout the supply chain to deliver lower cost and/or higher quality goods and services.
 - 4.3.2 Sub-Criteria for MAC 3.2: Innovation and disruptive technologies Activities that demonstrate and describe the tenderer's existing or planned:

- Understanding of opportunities to drive innovation and greater use of disruptive technologies, green technologies, efficiency and quality to deliver lower cost and/or higher quality goods and services.
- Creation of a design and tendering environment that is conducive to tenders that offer innovation and disruptive technologies. Illustrative examples: outcomes-based specifications enabling alternative approaches to be offered; codesign with users and communities; approaches that invite innovative approaches to be proposed and developed; activities that promote collaboration to access new technologies/green technologies and/or approaches.
- Measures to ensure the development of scalable and future-proofed new methods to modernise delivery and increase productivity.
- 4.4 To help ensure that the Social Value aspects of the supplier evaluation criteria that the Authority will apply to this procurement are fair and proportionate, the Authority would like Potential Suppliers to gauge the following as part of formal response;
 - a) The suggested policy themes and outcomes above are most relevant to this prospective project and could yield potential benefits;
 - b) the level of modern slavery risk in their supply chain; and
 - c) whether modern slavery risks can be managed/mitigated within the service or not.
- 4.5 Please refer to the Social Value Model Quick Reference Table for details of the potential model evaluation questions, model award criteria, model response guidance and reporting metrics for each policy outcome to help in the assessment https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/940828/Social-Value-Model-Quick-Reference-Table-Edn-1.1-3-Dec-20.pdf

5 OUTPUTS/DELIVERABLES

- 5.1 The deliverables of this project will include:
 - 5.1.1 a repository of Pride in Place data
 - 5.1.2 natural language processing model(s) that measures Pride in Place metric
 - 5.1.3 documentation of assumptions and model, preferably in GitHub
 - 5.1.4 report outlining the processes followed, assumptions made, model architecture, results, evaluation, and next steps
 - 5.1.5 knowledge sharing sessions to upskill DLUHC staff regarding natural language processing

6 KEY DATES & TENDERING PROCESS

- 6.1 If it is decided this service is required, it is anticipated that a procurement may start January 2023 with the contract to commence February 2023. These indicative dates are for information purposes only. DLUHC reserve the right to amend these dates at any time, and Potential Suppliers rely on them entirely at their own risk.
- 6.2 The contract is expected to be for a period of six months.
- 6.3 It is envisaged that this contract will be procured using the Crown Commercial Services (CCS) Dynamic Purchasing System (DPS) RM6126 Research and Insights.
- 6.4 Suppliers are able to apply to join the DPS at any time. During application to join the DPS, suppliers indicate which services they may be able to provide under the DPS. Please note

that new suppliers are able to register with the DPS via the following link and that this process can take around 2 weeks:

https://supplierregistration.cabinetoffice.gov.uk/dps#research

NB: Once you click on the link above, please scroll down to see 'Research and Insights' under Communications Marketplace.

6.5 If you have any questions about the DPS and would like to contact a member of the CCS team please use the links provided on the website above.

7 RESPONSE

- 7.1 Please respond by email to <u>commercialtenders@levellingup.gov.uk</u> with the following by 12:00 GMT on 11th January 2023 (the "Response Deadline").
 - Q1 Would you be interested in bidding for this project?
 - Q2 Is this project deliverable in the timeframe proposed?
 - Q3 Is what the Authority asking for clear?
 - Q4 What, if anything, has the Authority missed or overlooked in setting out their requirement?
 - Q5 Is there anything here which is irrelevant, outdated, or unnecessary?
 - Q6 What would the indicative cost be for this piece of work?
 - Q7 Are the proposed Social Value Themes, Policy Outcomes and Criteria appropriate for this requirement? Please elaborate on your reasons why and/or suggest alternatives that could be applied and why these alternatives would be more relevant?
 - Q8 In your opinion, what does Pride in Place mean? How can it be measured?
 - Q9 What is the recommended technology stack? Is this something you can provide?
 - Q10 What approach would you recommend when attempting to use social media feeds to measure Pride in Place?
 - Q11 Pride in Place varies by geography, how can it be ensured that geospatial aspects are considered in any model?
 - Q12 What data sources would be useful when measuring Pride in Place?

8 QUESTIONS AND CLARIFICATIONS

- 8.1 Potential Suppliers may raise questions or seek clarification regarding any aspect of this PTME document at any time prior to the Response Deadline. Questions must be submitted via email to commercialtenders@levellingup.gov.uk with the subject title 'CPD4124172 Evaluating Pride in Place Using Natural Language Processing'.
- 8.2 To ensure that all Potential Suppliers have equal access to information regarding this PTME exercise, responses to questions raised by Potential Suppliers will be published in a "Questions and Answers" document, which will also be circulated by email, with updates appearing at regular intervals (approximately two to three working days).

- 8.3 Responses to questions will not identify the originator of the question.
- 8.4 If a Potential Supplier wishes to ask a question or seek clarification without the question and answer being revealed, then the Potential Supplier must state this in their email and provide its justification for withholding the question and any response. If the Authority does not consider that there is sufficient justification for withholding the question and the corresponding response, the Potential Supplier will be invited to decide whether:
 - 8.4.1 the question/clarification and the response should in fact be published; or
 - 8.4.2 it wishes to withdraw the question/clarification.

9 GENERAL CONDITIONS

- 9.1 This PTME will help the Authority to refine the requirements and to understand the potential level of interest in the delivering requirements. It will also aid Potential Supplier's understanding of the requirements in advance of any formal competitive tender exercise.
- 9.2 The Authority reserves the right to change any information contained within this PTME at any time, and Potential Suppliers rely upon it entirely at their own risk.
- 9.3 The Authority reserves the right not to proceed with a competitive tender exercise after this PTME or to award any contract.
- 9.4 Any and all costs associated with the production of such a response to this PTME must be borne by the Potential Supplier.
- 9.5 No down-selection of Potential Suppliers will take place as a consequence of any responses or interactions relating to this PTME.
- 9.6 The Authority expects that all responses to this PTME will be provided by Potential Suppliers in good faith to the best of their ability in the light of information available at the time of their response.
- 9.7 No information provided by a Potential Supplier in response to this PTME will be carried forward, used or acknowledged in any way for the purpose of evaluating the Potential Supplier, in any subsequent formal procurement process.