# Home Office – Data Services and Analytics (DSA)Early Market Engagement for a Matching (Entity Resolution) Engine

## Purpose

To inform potential suppliers of DSA’s intent to issue a Request for Information (RFI) coupled with Technical Spike Testing (early Alpha work) for a Matching (Entity Resolution) Engine.

## Background

The Home Office’s Data Services & Analytics (DSA) is a centralised service within DDaT’s Enterprise Services and has been at the forefront of efforts to re-imagine the department’s relationship with data. It has led the way in professionalising our approach to the acquisition and analysis of data, promoting dynamic insight-led and evidence-based decision-making tools and techniques. The Home Office Data Matching (Entity Resolution) Engine is a key component of the DSA Data Integration Service and is fundamental to the DSA data platform delivering on DSA’s vision to be at the forefront in the use of data analytics in Government.

The Data Matching Engine deals with a significant amount of data from a variety of streaming and batch sources, it is required to process large volumes of data in near-real time across a variety of data domains (Persons, Objects, Locations & Events (POLE)). The matching engine needs to meet functional requirements for both persisted and non-persisted Entity Resolution (by “non-persisted”, we mean being able to resolve records from across multiple persisted sources and provide a search/wash/look-up capability to find possible matches without storing data in the engine).

A full set of requirements will be shared after the event.

## Commercial Context

DSA currently use IBM Big Match for the above purpose. However, the contract is coming up for renewal, we are aware that market capability has increased in this space and, given financial pressures, we wish to ensure we fully explore our options.

Within the context of the high-level requirements, our aim is to:

1. identify at least three (ideally five) products which support HO in its initial market analysis with Spike Testing.
2. Use this process to help develop our requirements and inform our future strategy

Suppliers should be aware that other Home Office related departments are aware of this exercise and we shall be sharing our findings with them.

## Initial Commercial Process

The following table outlines our current plans regarding the process moving forward:

|  |  |
| --- | --- |
| Activity | Timing |
| Issue of initial RFI pack and request for Non-Disclosure Agreement  | Mid March23 |
| Market Engagement Event (firm date to follow) | W/C 20 March 23 |
| Issue of any refinements to RFI pack following Market Engagement | March 23 |
| Response to RFI | March 23 |
| Down-selection for the purposes of Spike Testing\* | April 23 |
| Spike Testing with up to five suppliers | Mid Spring / Early Summer |
| Inform the market of further stages should they be required. | Early Summer 23 |

\* see below

It should be noted that the above is our best view of the process and timescales at time of writing. Both the process and the timing are likely to be subject to change.

## RFI Process in more detail

As implied at a high level above, the purpose of the RFI process is to provide information regarding possible future procurement and help inform our requirements and commercial strategy. Whilst the term down-selection is used in the context of spike testing, this is simply a means, for pragmatic reasons, to limit the number of solutions contributing to improving the requirements. IT IS NOT DOWNSELECTING FROM A COMPETITIVE PERSPECTIVE.

### Non-Disclosure Agreement

Prior to attending the event attendees will be required to sign a Non-Disclosure Agreement. This is because some of the details to be shared will be of a partially sensitive nature. The signed NDA needs to be sent to jeremy.bowland@homeoffice.gov.uk

### The RFI Pack

The RFI pack will include:

* A refined set of “Must Have” requirements;
* A limited set of questions;
* Outlines of the testing to be undertaken; and
* A brief set of terms (primarily there to ensure non-proprietary learnings from any testing can be incorporated into further Market Engagement activities and further competition pack should one be required).

Responses to the RFI pack will be used to select a balanced mix of solutions to contribute to Technical Spike Testing.

### Technical Spike Testing

It is again stressed that the purpose of Technical Spike Testing is **not** to identify favoured solutions but to:

* Validate that the wider market is able to offer solutions which can meet the essential “must have” criteria; and
* To provide information to refine the requirements and inform our future strategy.

It is intended that such testing be carried out by Home Office nominated individuals with supplier support (versus by the suppliers themselves).

## Wider Than Just Home Office DSA

As noted above Suppliers should be aware that the results of this RFI may be shared with other interested Home Office and wider government Departments.

**Disclaimer**

**This is not a guarantee or invitation to bid. We reserve the right to award a contract, to vary any structure, scope, scale and timing of the RFI process and any subsequent procurement.**

**The material does not necessarily reflect any specific Home Office policy; should any discrepancy arise official policy statements and publications take precedence.**

**Existing commercial arrangements with suppliers will not be discussed.**

**While we will seek to engage openly and respond to questions, we reserve the right not to answer questions where we believe it is not in our interest to do so.**