

Introduction

1. The purpose of this prospectus (and any associated published procurement notices) is for the Department for Environment Food & Rural Affairs (“Defra”)¹ to make known its intention of a planned procurement and to commence the market engagement process (in advance of commencing any formal procurement process) for the third generation of the Data Services Platform (the “DSP3”).
2. Prospective tenderers are requested to read this prospectus and to confirm their attendance at the market engagement event on Wednesday 8th September 2021 13:00 to 16:00 (via Microsoft Teams²) by completing the electronic form at <https://forms.office.com/r/c2KA5MVVdS> by Friday 3rd September 2021 17:00 should they wish to attend. Attendance is restricted to 2 attendees per organisation.
3. Following the market engagement event, prospective tenderers are invited to complete a market engagement questionnaire at <https://forms.office.com/r/K8QswJ0khl>³ by Monday 20th September 2021 10:00.

Disclaimer

4. This prospectus is written and provided in good faith; Defra reserves the right to alter any aspect of this document, or to not proceed with the procurement in any way. This prospectus summarises certain aspects of the procurement but does not purport to contain complete descriptions of it, nor to be all inclusive or contain all the information that a prospective tenderer may require when determining whether to take part in this market engagement process. No representation or warranty, express or implied, is or will be made, and no responsibility or liability is or will be accepted by Defra or any of its advisors as to the accuracy, adequacy or completeness of the information within this prospectus. This prospectus is not intended to form the basis of any investment decision or other evaluation by the recipient(s) and does not constitute and should not be considered as a recommendation by any person. Defra shall not be liable for any costs or expenses of any prospective tenderer in relation to any matter in connection with this market engagement process, howsoever incurred.

Background

5. Defra is the UK government department which is responsible for improving and protecting the environment. Defra aims to grow a green economy and sustain thriving rural communities, and also support the UK’s world-leading food, farming and fishing industries. Defra works with 33 agencies and public bodies⁴, collectively referred to as “Defra Group”.
6. As an evidence-led department, a substantial amount of environmental data is collected by Defra Group (with a wealth of uses beyond those required internally) and data is seen as critical to achieving Defra Group’s strategic objectives. By sharing data, Defra can inform and influence a wide variety of decisions and actions to help protect and improve the environment. Utilising data standards and core reference data when publishing Defra Group data supports this, meaning this data can be readily integrated with other systems and datasets to the benefit of all.
7. The Data Services Platform (“DSP”) makes environmental data, from across Defra Group, available to a wide range of users. The DSP is used to share data openly or with controlled groups of users (e.g. Defra Group supply chain) or where data contains third party rights. The intention of the DSP is to deliver services that will be world-leading in under-pinning environmental improvements. The DSP can be accessed at <https://environment.data.gov.uk>.
8. The DSP allows Defra to meet legal and policy obligations, including the Flood Risk Regulations, the Freedom of Information Act, the Re-use of Public Sector Information Regulations, the INSPIRE Regulations, and open data, public register and transparency commitments. There have been over 1.8 billion API calls to the DSP in 2020 and usage is growing. The DSP supports engagement and collaboration with a wide range of partners, serving 650 Defra Group partners and 300 contractors, improving flood risk awareness and supporting other mission critical services (e.g. Resilience Direct).

¹ The contract management of the DSP is undertaken by the Environment Agency for and on behalf of Defra. As such, any reference to “Defra” shall be deemed to mean Defra or any body authorised to act on their behalf in relation to this service (e.g. Environment Agency, Natural England, Animal and Plant Health Agency, Marine Management Organisation, and Rural Payments Agency) and each Defra Group organisation will be a named beneficiary of the services provided under the DSP3 contract.

² The digital invite for this event will be provided to registered attendees on Tuesday 7th September 2021.

³ The market engagement questionnaire has been replicated in Annex 1.

⁴ <https://www.gov.uk/government/organisations#department-for-environment-food-rural-affairs>

9. The original DSP (“**DSP1**”) was developed as a proof of concept in 2009 and has been successful in sharing data with the general public, public sector bodies, commercial organisations, Defra Group staff and Defra’s supply chain. DSP1 laid the foundation for the suite of services which have since been developed, forming a comprehensive data sharing platform, most recently via the second iteration of the DSP (“**DSP2**”)⁵. The DSP2 contract ends in 2023.
10. The DSP2 is made up of 3 principal services:
- a) **spatial and non-spatial data sharing service:** a service which provides access to spatial data and non-spatial data via a number of user management interfaces, such as:
 - **partner access:** allows professional partners (e.g. local authorities, incident responders etc.) to download public and non-public datasets that are ‘cookie cut’ to their area of interest and accessible in a format of choice (such as standard spatial data formats, including web map service (WMS) and web feature service (WFS) data feeds).
 - **public access:** provides public download, WMS and WFS capabilities of spatial data for Defra. Data is discoverable via published metadata records on www.data.gov.uk.
 - **survey data access:** provides public access to extensive and very large survey data, including lidar composite and time-stamped digital terrain models (DTMs) and digital surface models (DSMs), and point-cloud, aerial photography, compact airborne spectrographic imager (CASI), bathymetry, and derived datasets.
 - b) **linked data service:** allows the publication of machine readable real-time data via APIs and widgets (including bathing water, catchment data, water quality explorers, and public registers).
 - c) **metadata catalogue**⁶: enables the creation, editing, storage and publication of standards-compliant metadata records, internally to Defra staff and externally to www.data.gov.uk.
11. Underpinning the three principal services is the community forum and service desk which provides the route to capture user feedback in order to continuously improve the service. This complies with Defra’s core principle of “building a community around Defra’s data”.

DSP3 objectives

Critical Success Factor	Sub-criteria
CSF1: Re-procure the DSP whilst ensuring no loss in functionality or break in service	1.1. To uphold the business aim of making data easily accessible to users.
CSF2: Address process and functional improvements	2.1. To provide analysis ready data, e.g. generic intermediate products, to reduce post-processing activities and duplication. 2.2. To integrate with identity management solutions for single sign-on (SSO). 2.3. To enable quicker responses to role allocations for users. 2.4. To improve access management and security management process in accordance with best practice (e.g. open web application security project (OWASP)). 2.5. To reduce the time it takes to self-publish data, agnostic of technology platform. 2.6. To improve data discovery (e.g. through thematic lists etc.) and usability of the environment.data.gov.uk portal.

⁵ <https://ted.europa.eu/udl?uri=TED:NOTICE:242175-2018:TEXT:EN:HTML>

⁶ <https://deframetadata.com/geonetwork/srv/eng/catalog.search#/home>

Critical Success Factor	Sub-criteria
<p>CSF3: Develop the DSP as a single point of access to data within Defra Group</p>	<ul style="list-style-type: none"> 3.1. To deliver a platform that provides a single point for publishing data. 3.2. To explore capabilities that could replace tactical or legacy solutions (e.g. SPIRE, EA Maps, MAGIC⁷). 3.3. To improve the use of third-party data, particularly in GIS. 3.4. To increase the interoperability of linked data and GIS data in the DSP. 3.5. To reduce duplication of data and associated costs (£ and carbon). 3.6. To make data discoverable and available in a range of formats and services to support the wider knowledge economy. 3.7. To deliver a platform that can be used to further develop the DSP interactive mapping capability for spatial services and data visualisation.
<p>CSF4: Expand DSP usage and continually improve the DSP</p>	<ul style="list-style-type: none"> 4.1. To provide scalability to serve increasing user numbers. 4.2. To enable broader and more flexible capabilities that can meet present and future needs across Defra Group. 4.3. To improve value for money and cost effectiveness of the DSP.

Table 1

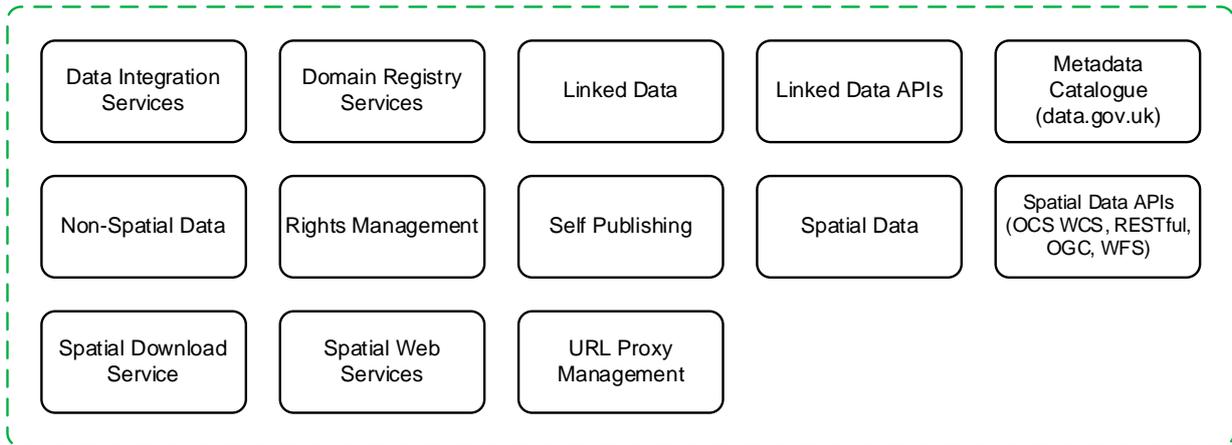
DSP3 capabilities

Overview

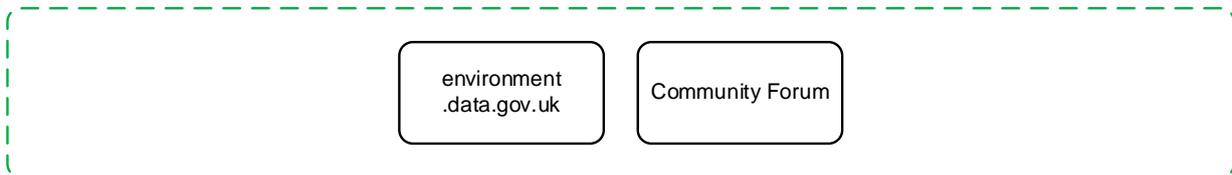
12. The initial set of capabilities required for the DSP3 are outlined in Figure 1. Defra’s vision is that the DSP3 will be built using open standards in order to be scalable and adaptable to changing user needs throughout the term of the contract

⁷ <https://magic.defra.gov.uk/>

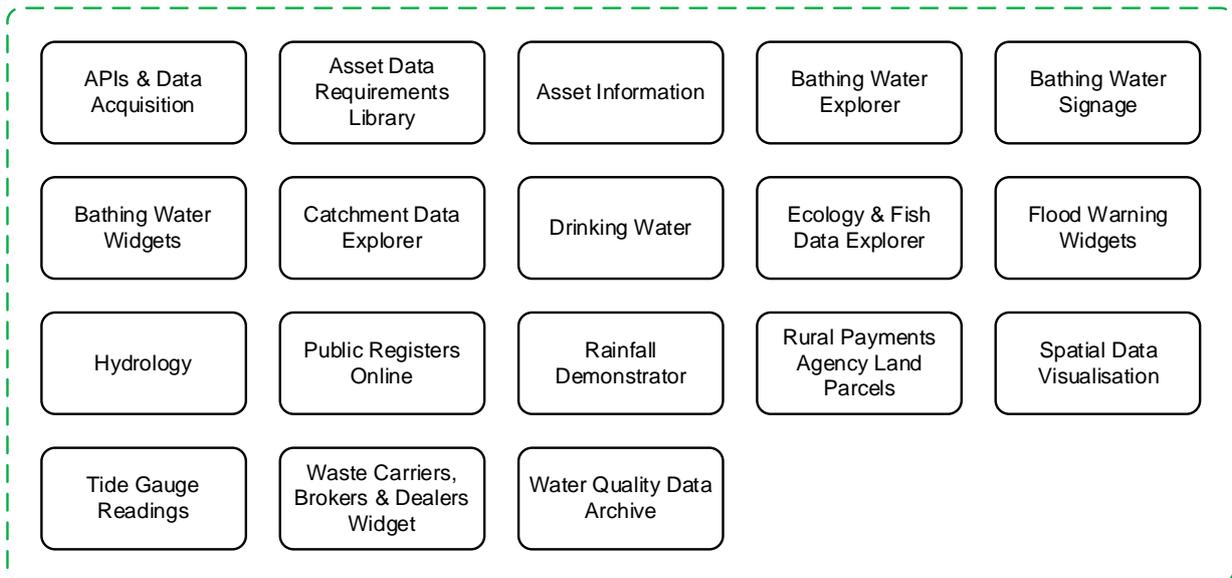
Data Management Services



Digital Services



Applications



Service Management

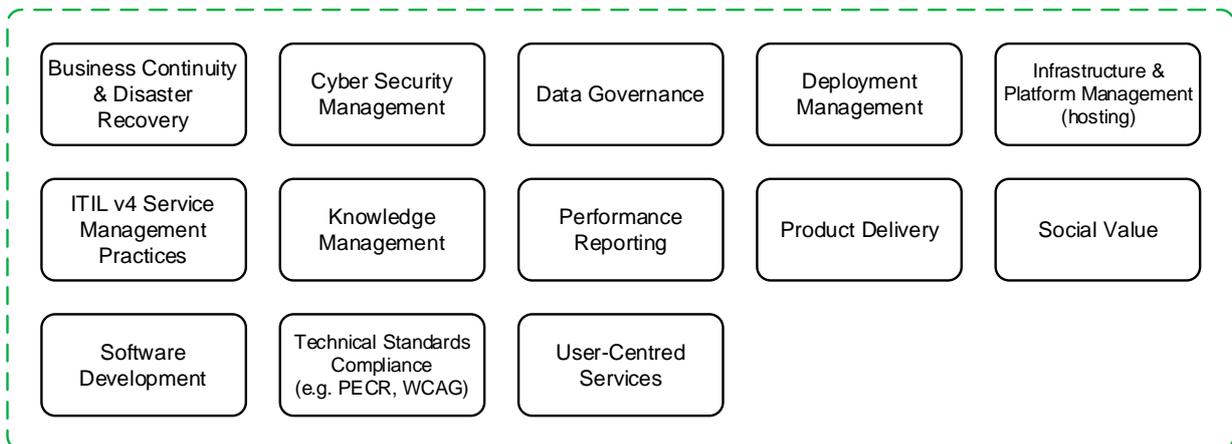


Figure 1

13. Whilst Defra will use the market engagement and procurement process to refine our packaging approach, Defra is currently minded to procure all capabilities as a single contract and the capabilities have not been disaggregated into a greater number of contracts at this stage because:
- best value will most likely be achieved by giving responsibility to one supplier. Further disaggregation would increase the service and technical integration risks, and any potential savings achieved through disaggregation would be offset through increased contract management oversight and the additional resources required. This is also true for further disaggregation of the service components (e.g. infrastructure and platform management (hosting));
 - by giving responsibility to one supplier for the technical solution, the responsibility for implementation, integration, operation, scalability, and reusability is sat with the party best placed to manage it and deliverability is improved by fewer contract management interfaces; and
 - a larger single contract is likely to more attractive to the market and therefore drive greater competition and better value for money for Defra.

Potential implementation approaches

14. Defra currently envisages two potential implementation approaches:
- parallel running:** the DSP3 supplier will build their technical solution whilst the DSP2 solution remains operational and then undertake a cutover for users from the DSP2 solution to the DSP3 solution on a specified date; or
 - transition and transform:** the DSP3 supplier will transition the current capabilities from the DSP2 supplier in order to operate the current service from a specified date (“lift and shift”) and then transform the DSP service in accordance with the DSP3 suppliers proposed technical solution, going live for users on a specified date.
15. Defra currently anticipates that either approach will take up to 12 months.
16. With regard potential implementation approaches, Defra would welcome input from prospective tenderers via the market engagement questionnaire.

Procurement approach

Overview

17. An indicative outline of the proposed procurement process is outlined below.

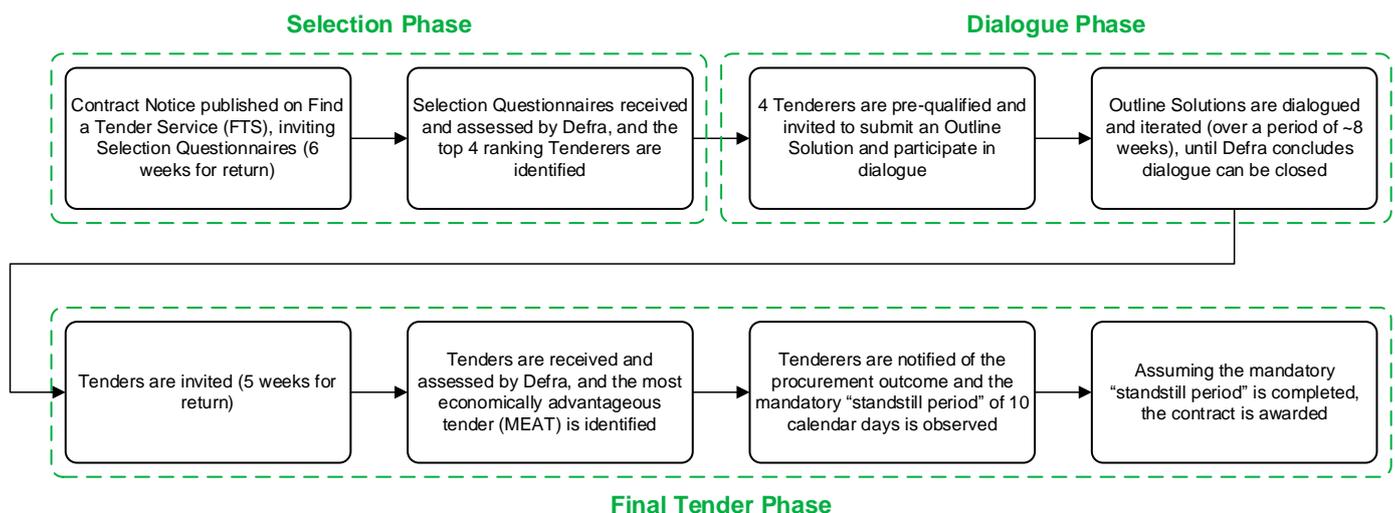


Figure 2

Choice of procedure

18. Due to the broad user base and business criticality of the DSP, Defra is minded to use a “light” and brisk form of the competitive dialogue procedure to procure the DSP3, over a period of no more than 9 months. Whilst Defra will seek to minimise the cost of the procurement exercise to all parties, Defra believes that holding focussed dialogue with Tenderers on complex and challenging issues such as implementation before calling for tenders will increase the likelihood that implementation plans and

proposed technical solutions will be fit for purpose, and therefore result in tenders which are capable of acceptance and represent greater value for money, yielding an overall lower, whole-life risk profile for service delivery.

Selection

19. Requests to participate in the procurement will be requested using the UK government standard selection questionnaire⁸, which will outline prospective tenderers proposed participation model, their compliance with mandatory and discretionary grounds for exclusion, their economic and financial standing, and their technical or professional ability, in order to test the capacity and capability of prospective tenderers' eligibility to take part in the DSP3 procurement. Technical and professional ability is likely to be tested in the following key areas:

- a) transition and transformation of public facing digital services;
- b) operation and continuous improvement of public facing digital services;
- c) operation and continuous improvement of high-volume data integration services;
- d) operation and continuous improvement of spatial and non-spatial data platforms; and
- e) operation and continuous improvement of linked data platforms.

20. Subject to there being sufficient tenderers that meet the selection requirements, Defra is minded to:

- a) limit the number of pre-qualified tenderers to be invited to participate in the dialogue and subsequent phases of the procurement exercise to 4 tenderers in total; and
- b) only undertake the dialogue with (and subsequently invite tenders from) the 4 pre-qualified tenderers (as opposed to conducting the procurement in a number of successive stages in order to reduce the number of tenderers),

in order to minimise the cost of the procurement exercise to all parties, whilst still allowing for sufficient competition for Defra.

Areas for dialogue

21. Defra intends to hold focussed dialogue on the following key areas:

- a) **implementation approach:** the DSP had over 1.8 billion API calls in 2020, with DSP data used in a large number of real time, mission critical, public facing services. As such, dialogue will be required to explore how alternative implementation approaches can ensure a frictionless implementation for current DSP users, ensuring disruption is minimised for the existing user base through a pro-active communications management strategy. In addition, reassurance will be required that tenderers can design and build digital services that comply with the UK governments service standard⁹, following the phases of an agile project¹⁰ (e.g. discovery, alpha, private beta, public beta, live). Specific attention will need to be given to how tenderers propose to invite a limited number of users to use the DSP3 service (private beta) before cutover from DSP2 to DSP3 for all users (public beta).
- b) **technical solution:** in order to gain assurance that any new or innovative solution meets the DSP3 requirements, a detailed understanding of tenderers outline solutions will be needed. It will also be beneficial to dialogue:
 - the optimum system architecture and infrastructure/platform management (hosting) arrangements to meet the DSP3 performance and scalability requirements;
 - the responsibility for digital services product delivery to ensure responsibility is allocated to the party best placed to manage it and ensuring user needs continue to be met;
 - tenderers solutions for evolving the DSP and leveraging its data sources for public good, increasing channel shift (away from non-digital sources) and improving user adoption (of the DSP services);

⁸ <https://www.gov.uk/government/publications/procurement-policy-note-816-standard-selection-questionnaire-sq-template>

⁹ <https://www.gov.uk/service-manual/service-standard>

¹⁰ <https://www.gov.uk/service-manual/agile-delivery>

- tenderers compliance with technical standards, such as:
 - Technology Code of Practice¹¹ and the service standard;
 - the Accessibility Regulations 2018;
 - the Privacy and Electronic Communications Regulations 2003 (PECR), the Data Protection Act, and the General Data Protection Regulations;
 - relevant technical standards and associated best practices for metadata, spatial data and linked data services^{12 13 14}; and
 - compliance with the relevant INSPIRE Regulations¹⁵ for metadata and network services and, where required, compliance with data specifications and spatial data services.
 - potential reuse of Defra's own enterprise license agreements (e.g. public cloud/hosting, mapping solutions) for use within tenderers' solutions; and
 - tenderers proposed solutions for meeting social value policy objectives, ensuring proportionality to the service and deliverability.
- c) **future proofing and optional services:** the intention of the DSP3 is to provide a scalable solution that offers proportionate flexibility to be used across the Defra Group, provide value-add features that can be used to replace other (aged) Defra Group systems (in whole or in part), and enable improved interoperability between systems. It will be beneficial to dialogue tenderer's proposals for achieving scalability and reusability across the Defra Group and the wider public sector.
- d) **payment mechanism and performance management regime:** dialogue on the payment mechanism and performance management regime are required to ensure an appropriate level of risk transfer and to enable consideration of innovative solutions which might require different performance or payment structures.
- e) **value for money:** in order to continually improve the value for money of the DSP operation and provide value for money for optional services, dialogue will be required to ensure that value for money can be achieved sustainably over the course of the contract. In addition, the DSP3 requirements are complex and it will be beneficial if these can be clarified or refined once they have been discussed with tenderers so that cost and benefit trade-offs can be optimised and innovative approaches encouraged.

Award criteria

22. Defra is minded to adopt the following award criteria for DSP3:

- a) technical solution: 65%
- b) social value: 10%
- c) price: 25%.

23. As required by PPN06/20¹⁶, Defra is required to explicitly evaluate social value, where the requirements are related and proportionate to the subject-matter of the contract. Defra would encourage prospective tenderers to review the social value model¹⁷ and provide feedback via the market engagement questionnaire on the applicability of the model award criteria and associated sub-criteria within the social value model, including:

- a) Theme 1: COVID-19 recovery (help local communities to manage and recover from the impact of COVID-19);

¹¹ <https://www.gov.uk/guidance/the-technology-code-of-practice>

¹² <https://www.ogc.org>

¹³ <https://www.agi.org.uk/uk-gemini>

¹⁴ <https://www.w3.org/TR/sdw-bp>

¹⁵ <https://inspire.ec.europa.eu>

¹⁶ <https://www.gov.uk/government/publications/procurement-policy-note-0620-taking-account-of-social-value-in-the-award-of-central-government-contracts>

¹⁷ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/940826/Social-Value-Model-Edn-1.1-3-Dec-20.pdf

- b) Theme 2: Tackling economic inequality (create new businesses, new jobs and new skills);
- c) Theme 2: Tackling economic inequality (increase supply chain resilience and capacity);
- d) Theme 3: Fighting climate change (effective stewardship of the environment);
- e) Theme 4: Equal opportunity (reduce the disability employment gap);
- f) Theme 4: Equal opportunity (tackle workforce inequality);
- g) Theme 5: Wellbeing (improve health and wellbeing);
- h) Theme 5: Wellbeing (improve community integration).

Form of contract

24. The Cabinet Office contract tiering tool¹⁸ indicates that the DSP3 is a gold contract, therefore Defra intends to utilise the government legal services model services contract¹⁹ for the DSP3 procurement, removing any schedules which are disproportionate to the DSP3 service.

Key commercial principles

25. Defra is minded to adopt the following key commercial principles for the DSP3 procurement.

Commercial area	Position
Contract length	Defra are minded to adopt an initial implementation period of up to 12 months, followed by a further 5 years of operational service upon successful completion of the implementation period, with the option to extend the contract by an aggregate duration of up to an additional two years (i.e. implementation (<12 months)+5+2).
Payment mechanism	Defra are minded to adopt milestone payments during the implementation period, followed by fixed price service charges after operational go live. Defra would welcome input from prospective tenderers via the market engagement questionnaire with regard any alternative payment mechanisms for the operational service (e.g. fixed/variable charge per API call; mixture of fixed charge up to a volume ceiling, plus variable charge above the volume ceiling etc.).
Performance management regime	<p>During implementation, delay payments will apply for key milestones where milestone dates and the associated deliverables have failed to be achieved. This will include key implementation milestones (e.g. commencement or completion of alpha, private beta, and public beta phases).</p> <p>Once DSP3 is operational, failure to meet the targets associated with a key performance indicator will result in service credits being deducted from service charges. Deductions arising in respect of any failure to achieve key performance indicators will not exceed 20% of the total service charge otherwise due each month.</p>
Value for money	<p>Defra is minded to include provisions relating to benchmarking, preventing excessive supplier profits, and open book accounts.</p> <p>Defra also proposes to include ongoing continuous improvement obligations, including a 50/50 “gain share” for ideas proposed by the supplier which reduce the cost of the service.</p>
Limits of liability	<p>Unlimited liability for certain defaults, including those covered by law.</p> <p>150% of annual contract value for liabilities not covered by unlimited liability.</p>

¹⁸ The contract tiering tool helps classify UK government contracts in gold, silver, or bronze by assessing value, complexity and level of risk. This tool can also help determine the criticality and level of contract management required.

¹⁹ <https://www.gov.uk/government/publications/model-services-contract>

Commercial area	Position
	Allowance for General Data Protection Regulation (GDPR) liabilities.
Financial recourses	Abatement regime, ratchet, damages, rectification plans, step-in rights, remedial advisor, and termination.
Intellectual Property Rights (IPR)	<p>Supplier’s software and pre-existing IPRs: Supplier provides a license to Defra on a perpetual, royalty free, and non-exclusive basis</p> <p>New source code (“Specially Written Software”): Ownership of the IPR resides with the UK government, except for those pre-existing components where IPR resides elsewhere.</p> <p>COTS software (“Third Party Software”): Supplier ‘procures’ a grant of direct licence from the owner of the software to Defra, either under terms equivalent to those for the supplier’s software or under the normal commercial terms (for COTS software).</p> <p>Defra data and pre-existing IPRs: Defra provides a license to the Supplier for the purposes of this agreement throughout the contract term.</p>
Termination rights and financial distress	Termination for convenience, or due to a financial distress event, or force majeure, and limited rights for supplier termination due to Defra’s default.
Exit	Detailed exit plan, plus capped exit fees.
Transfer of Undertakings Protection of Employment (TUPE)	TUPE may apply and will be confirmed in due course. Defra will not have any liability for TUPE.

Table 2

Annex 1: Market engagement questionnaire

No.	Question	Response type	Mandatory	Relevant section
1 to 6	Organisation details	Free text for: <ul style="list-style-type: none"> • Organisation • First name • Surname • Job title • E-mail address • Phone number 	Yes	
7.	Which elements of the service are you likely to tender for?	Select multiple options from list of values: <ul style="list-style-type: none"> • Applications development and maintenance • Data integration services • Digital services development and maintenance • Domain registry services • Infrastructure and platform management (hosting) • Linked data services • Metadata management services • Non-spatial data services • Spatial data services • User-centered services • Other 	Yes	
8.	Is your company an SME?	Yes/No	Yes	
9.	Are you happy to share your details with other prospective tenderers?	Yes/No	Yes	
10.	Are you happy to be contacted by Defra for any follow on questions?	Yes/No	Yes	

No.	Question	Response type	Mandatory	Relevant section
11.	What software and services do you offer which are relevant to the DSP3? Who are your major customers?	Free text	Yes	
12.	DSP3 will rely on use and adherence of relevant data standards and best practices. What software and services do you offer which incorporate such standards?	Free text	Yes	
13.	Do you agree with the way that Defra is proposing to package this service (i.e. as a single contract)?	Rate from Strongly Disagree to Strongly Agree	Yes	Figure 1.
14.	If you disagree or strongly disagree with the way that Defra is proposing to package this service, please outline your preferred packaging approach	Free text response	No	Figure 1.
15.	What is your preferred implementation approach?	Select one option from list of values: <ul style="list-style-type: none"> • Parallel running • Transition and transform • Other 	Yes	Paragraph 14.
16.	Do you agree with the suggested implementation period of up to 12 months?	Rate from Strongly Disagree to Strongly Agree	Yes	Paragraph 15.
17.	Do you have any other observations regarding implementation that will assist Defra in refining our approach?	Free text response	No	Paragraph 15.
18.	Do you agree with the use of a light form of the competitive dialogue procedure for this procurement?	Rate from Strongly Disagree to Strongly Agree	Yes	Paragraph 18.
19.	Do you agree with the potential selection criteria?	Rate from Strongly Disagree to Strongly Agree	Yes	Paragraph 19.
20.	Do you agree with the limit on potential tenderers (maximum of 4)?	Rate from Strongly Disagree to Strongly Agree	Yes	Paragraph 20.
21.	Do you agree with the proposed areas for dialogue?	Rate from Strongly Disagree to Strongly Agree	Yes	Paragraph 21.

No.	Question	Response type	Mandatory	Relevant section
22.	Do you agree with the proposed award criteria?	Rate from Strongly Disagree to Strongly Agree	Yes	Paragraph 22.
23.	Based on your experience of delivering equivalent services, which elements of the social value model are related and proportionate to the subject-matter of the contract?	Select multiple options from list of values: <ul style="list-style-type: none"> • Theme 1: COVID-19 recovery (help local communities to manage and recover from the impact of COVID-19); • Theme 2: Tackling economic inequality (create new businesses, new jobs and new skills); • Theme 2: Tackling economic inequality (increase supply chain resilience and capacity); • Theme 3: Fighting climate change (effective stewardship of the environment); • Theme 4: Equal opportunity (reduce the disability employment gap); • Theme 4: Equal opportunity (tackle workforce inequality); • Theme 5: Wellbeing (improve health and wellbeing); • Theme 5: Wellbeing (improve community integration). 	Yes	Paragraph 23.
24.	Do you agree with the use of the model services contract for this procurement?	Rate from Strongly Disagree to Strongly Agree	Yes	Paragraph 24.
25.	Do you agree with the suggested contract term of implementation (<12 months) + 5 + 2?	Rate from Strongly Disagree to Strongly Agree	Yes	Table 2.

No.	Question	Response type	Mandatory	Relevant section
26.	Do you agree with the use of fixed price milestone payments (with associated delay payments attributable to late delivery) during implementation?	Rate from Strongly Disagree to Strongly Agree	Yes	Table 2.
27.	Do you agree with the use of fixed price service charges (with associated service credits attributable to poor performance, capped at 20% of the total charges due in any contact year) during operation?	Rate from Strongly Disagree to Strongly Agree	Yes	Table 2.
28.	Based on your experience of delivering equivalent services, can you recommend any alternative payment mechanisms for the operational service which may represent better value for money for Defra?	Free text response	No	Table 2.
29.	Do you agree with the other key commercial positions outlined in Table 2 of the prospectus?	Rate from Strongly Disagree to Strongly Agree	Yes	Table 2.
30.	Based on your experience of delivering equivalent services, what are the potential cost drivers you envisage for DSP3?	Free text response	No	
31.	Based on your experience of delivering equivalent services, can you recommend any commercial models for operating this service that would reduce the costs to Defra?	Free text response	No	
32.	Based on your experience of delivering equivalent services, what wider risks should we be considering and addressing in order to achieve well informed tenders?	Free text response	No	
33.	Based on your experience of delivering equivalent services, please provide any additional insights that could help Defra improve this proposed procurement exercise	Free text response	No	