

# Order Schedule 20 (Order Specification)

## 1. INTRODUCTION

### 1.1. General

- 1.1.1. This Order Schedule 20 (Order Specification) specifies the intended scope of the Services and Deliverables to be provided by the Supplier under this Order Contract and a description of what each of the Services and Deliverables entails.
- 1.1.2. The requirements for the Services and Deliverables have been categorised under the following headings:
  - (a) Implementation Services, comprising the elements as set out in Paragraph 2;
  - (b) Operational Services, comprising the elements as set out in Paragraph 3; and
  - (c) Optional Services, comprising the elements as set out in Paragraph 4.
- 1.1.3. The Buyer's responsibilities for this Order Contract are set out in Paragraph 5.

### 1.2. Scope

- 1.2.1. The capabilities required for this Order Contract are summarised below:
  - (a) to implement a Minimum Viable Product within twelve (12) months of the Order Start Date;
  - (b) to provide the following core functionality for Users:
    - to use Imagery Sources to identify Farm Habitats;
    - to monitor Land Use and Cover Changes with respect to farming activities;
    - to extract Markers from Imagery Sources;
    - to Ingest Imagery Sources and other data from other Buyer Systems;
    - to Publish outputs to other Buyer Systems;
    - to monitor compliance with Scheme Agreements for a Land Parcel; and
    - for Users to utilise the Supplier Solution in the field and add their own Imagery Sources and Ground Truth Data for a Land Parcel.
  - (c) to provide product delivery, user-centred services, and IT Service Management;
  - (d) to provide the capability to introduce future services, such as integrating additional Imagery Sources, provisioning additional Imagery Sources, developing new data products derived from Imagery Sources, developing new Markers, and integrating the Supplier Solution with other Buyer Systems; and
  - (e) to provide the option for other Defra Group Bodies and Other UK Paying Agencies to utilise the Services.

## 2. IMPLEMENTATION SERVICES

### 2.1. General

- 2.1.1. The Supplier shall provide the Implementation Services necessary for the Supplier to:
  - (a) provide the Operational Services required from Achievement of the MVP Deployed Milestone (as set out in Paragraph 3); and

(b) meet the Test Success Criteria for each Test relating to each Milestone as set out in Order Schedule 13 (Implementation Plan and Testing) Part A Annex 1 (Implementation Plan).

2.1.2. The MVP Deployed Milestone Date shall be no later than twelve (12) months from the Order Start Date and the ELS Complete Milestone Date shall be two (2) months from Achievement of the MVP Deployed Milestone.

## **2.2. Working with the Buyer and Other Suppliers**

2.2.1. The Supplier shall lead a collaborative service design process with the Buyer and Other Suppliers to capture and document a common understanding of the roles and responsibilities of all parties within the ITSM model for the Supplier Solution. The Supplier shall document this in an Operational Level Agreement.

2.2.2. The Supplier shall work collaboratively with the Buyer and Other Suppliers in order to agree technical interfaces between the Supplier Solution and Buyer System(s), in accordance with the integration requirements as set out in Annex C.

2.2.3. The Supplier shall work collaboratively with the Buyer on the implementation of the Markers and shall mutually agree the provision of Ground Truth Data.

## **2.3. Spatial Data Mart integration**

2.3.1. The Supplier shall work collaboratively with the Buyer in order to agree technical and operational interfaces between the Supplier System and the Buyer's Spatial Data Mart, which enable the Supplier to Ingest Land Cover Information, Land Parcel Information, and Scheme Options Information into the Supplier System. The Supplier shall document this in a Spatial Data Mart Integration Solution Design.

## **2.4. Design documentation**

2.4.1. The Supplier shall produce an Integration Specification for the Supplier Solution using the OpenAPI Specification.

2.4.2. The Supplier shall produce a Detailed Design for the Supplier Solution in accordance with the architecture standards as set out in Annex E.

2.4.3. The Supplier shall produce a Data Architecture Design for the Supplier Solution in accordance with the architecture standards as set out in Annex E.

2.4.4. The Supplier shall produce a Remote Monitoring Methodology for the Supplier Solution, which shall set out how the Supplier shall:

(a) process Imagery Sources;

(b) integrate new Imagery Sources;

(c) optimise existing Markers for England's geography, agricultural contexts and natural environments;

(d) generate new Markers;

(e) utilise and continually improve existing Markers from third parties (e.g. the Buyer's Bare Soil Marker and Surface Water Marker);

(f) validate the output of Markers;

(g) scale the Markers for national usage; and

(h) present visual evidence to support how the Buyer monitors compliance with Scheme Agreements for a Land Parcel.

## **2.5. Implementation Documentation**

- 2.5.1. The Supplier shall produce the following Documentation during the Implementation Phase, and maintain it accordingly during the Operational Phase, in accordance with the requirements of the following Schedules.

Document	Relevant Schedule
Quality Plans	Order Schedule 6 (ICT Services) Paragraph 6.
BCDR Plan	Order Schedule 8 (Business Continuity and Disaster Recovery) Paragraph 2.
Security Management Plan	Order Schedule 9 (Security) Paragraph 4.
Exit Plan	Order Schedule 10 (Exit Management) Paragraph 4.
Implementation Plan	Order Schedule 13 (Implementation Plan and Testing) Part A (Implementation) Paragraph 2.
Test Strategy	Order Schedule 13 (Implementation Plan and Testing) Part B (Testing) Paragraph 3.

## **2.6. Design, build, and test**

- 2.6.1. The Supplier shall implement the Supplier System in incremental New Releases.
- 2.6.2. The Supplier shall configure the Software to meet the functional requirements set out in Annex B using Buyer Data.
- 2.6.3. The Supplier shall configure the Software to realise the Remote Monitoring Methodology.

## **2.7. Business readiness**

- 2.7.1. The Supplier shall support the Buyer in producing the materials required for internal communications during the Implementation Phase.
- 2.7.2. The Supplier shall provide support to Users in the first use of the functionality introduced from date upon which the MVP Deployed Milestone is Achieved for a period of twenty (20) Working Days during Normal Working Hours.
- 2.7.3. The Supplier shall support the Buyer in undertaking User engagement, in the form of system demonstrations and “show and tells”.
- 2.7.4. The Supplier shall support the Buyer in producing the Training Needs Analysis.
- 2.7.5. The Supplier shall produce a Training Plan using a Train the Trainer methodology.
- 2.7.6. The Supplier shall produce a System Manual, which the Buyer can use to develop internal procedural documents.
- 2.7.7. The Supplier shall prepare simple scenario-based training which allows Users to practice aspects of their role.
- 2.7.8. The Supplier shall prepare e-Learning Modules (lasting no more than thirty (30) minutes) which demonstrates how Users use the Supplier Solution.
- 2.7.9. The Supplier shall provide four (4) virtual (remote) training sessions for the Buyer’s Super Users, assumed to be no more than six (6) hours, on all relevant elements of the Supplier Solution to 20 Users (five (5) per training session) using a Train the Trainer methodology.
- 2.7.10. The Supplier shall report on training completion rates to the Buyer.

### **3. OPERATIONAL SERVICES**

#### **3.1. Non-functional requirements**

3.1.1. The non-functional requirements are set out in Annex A.

#### **3.2. Functional requirements**

3.2.1. The functional requirements are set out in Annex B.

#### **3.3. Integration requirements**

3.3.1. The integration requirements are set out in Annex C.

#### **3.4. Service management requirements**

##### *General management*

3.4.1. The Supplier shall undertake all the IT Service Management general management practices as set out in ITIL and the IT Service Management Standards in Annex E in order to deliver the Operational Services. The Supplier shall integrate their ITSM activities in accordance with the principles set out in the Buyer's Service Run Manual.

3.4.2. The Supplier shall maintain the Documentation (including training materials) throughout the Order Contract Period to ensure it is consistent with the current version of the Supplier Solution.

3.4.3. The Supplier shall produce Transparency Reports, in accordance with the requirements of Order Schedule 1 (Transparency Reports).

3.4.4. The Supplier shall ensure its continual improvement processes and procedures incorporate the requirements of Order Schedule 3 (Continuous Improvement).

3.4.5. The Supplier shall produce a Continuous Improvement Plan, in accordance with the requirements of Order Schedule 3 (Continuous Improvement).

3.4.6. The Supplier shall ensure its measurement and reporting processes and procedures incorporate the requirements of Order Schedule 14 (Service Levels).

3.4.7. The Supplier shall produce Performance Monitoring Reports, in accordance with the requirements of Order Schedule 14 (Service Levels) Part B.

3.4.8. The Supplier shall ensure its information security management processes and procedures incorporate the requirements of Order Schedule 9 (Security).

3.4.9. The Supplier shall ensure its service validation and testing processes and procedures incorporate the requirements of Order Schedule 13 (Implementation Plan and Testing) Part B (Testing).

3.4.10. The Supplier shall ensure its financial management processes and procedures incorporate the requirements of Joint Schedule 7 (Financial Difficulties).

3.4.11. The Supplier shall ensure its knowledge management and records management processes and procedures incorporate the requirements of Order Schedule 10 (Exit Management).

3.4.12. The Supplier shall ensure its governance processes and procedures incorporate the requirements of Order Schedule 15 (Order Contract Management).

##### *IT Service Management*

3.4.13. The Supplier shall undertake all the IT Service Management practices as set out in ITIL and the Standards in Annex E in order to deliver the Operational Services.

- 3.4.14. The Supplier shall provide Second Line Support and Third Line Support for the Supplier Solution. The Buyer shall provide First Line Support for the Supplier Solution.
- 3.4.15. The Supplier shall provide an English speaking Second Line Support function aligned to the IT Service Management Standards in Annex E, accessible as a minimum via phone and email, which shall serve as a single point of contact for First Line Support for all queries relating to support of the Supplier Solution.
- 3.4.16. The Supplier shall have an appropriate number of suitably skilled and experienced Personnel to operate the Second Line Support and Third Line Support functions during Normal Working Hours.
- 3.4.17. The Supplier shall store and maintain records of all communications to Second Line Support including, as a minimum, details and categorisation of what was received or sent, the communications transmitted, the date and time of communications received or sent, and User details.
- 3.4.18. The Supplier shall operate an access control regime for the Supplier Solution and notify Users within two (2) Working Days of any such access being granted. The Buyer shall provide and maintain the list of the Buyer's staff who are authorised by the Buyer to access certain parts of the Supplier Solution.
- 3.4.19. The Supplier shall inform the Buyer of any Permitted Maintenance with ten (10) Working Days advance notification, in accordance with Order Schedule 6 (ICT Services) Paragraph 8 (Maintenance of the ICT Environment).
- 3.4.20. The Supplier shall maintain a Maintenance Schedule, in accordance with the requirements of Order Schedule 6 (ICT Services) Paragraph 8 (Maintenance of the ICT Environment).
- 3.4.21. The Supplier shall undertake IT Change Management in accordance with ITIL and the Buyer's Service Run Manual.
- 3.4.22. The Supplier shall monitor and manage the Supplier Solution.
- 3.4.23. The Supplier shall log software application errors in the Supplier Solution through an IT Service Management process that is controlled from receipt of the initial fault report to fix of the Supplier Solution.
- 3.4.24. The Supplier shall ensure that all Service Incidents, Problems and any associated New Releases are logged with First Line Support.
- 3.4.25. The Supplier shall provide configuration documentation and release notes for each New Release.
- 3.4.26. The Supplier shall use the Buyer's ITSM Toolset (currently ServiceNow) in delivery of its IT Service Management activities.
- 3.4.27. The Supplier shall ensure that the ITSM Toolset is able to segregate the Buyer's data and metadata from the Supplier's other client's data and metadata captured using the same ITSM Toolset.
- 3.4.28. The Supplier shall ensure that the ITSM Toolset is able to track when Service Incidents, Problems, or other entries in the ITSM Toolset are set to breach a Service Level.
- 3.4.29. The Supplier shall produce Knowledge Articles and record Knowledge Articles within the ITSM Toolset.
- 3.4.30. The Supplier shall ensure that the ITSM Toolset provides the capability to log and track and report issues, questions and User feedback in a structured and consistent format.

- 3.4.31. The Supplier shall produce Help Articles and record Help Articles within the Supplier Solution. The Buyer's Super Users shall provide functional support of the Supplier Solution to Users who are not Super Users.
- 3.4.32. The Supplier shall keep all the Supplier Solution components within support in accordance with Order Schedule 6 (ICT Services) Paragraph 5 (Provision of ICT Services).
- 3.4.33. The Supplier shall ensure its IT asset management processes and procedures incorporate the requirements of Order Schedule 6 (ICT Services).
- 3.4.34. The Supplier shall ensure its service continuity management processes and procedures incorporate the requirements of Order Schedule 8 (Business Continuity and Disaster Recovery).

#### *Technical management*

- 3.4.35. The Supplier shall undertake all the IT Service Management technical management practices as set out in ITIL and the IT Service Management Standards in Annex E in order to deliver the Operational Services.
- 3.4.36. The Supplier shall conduct training in the Pre-Production Environment and will not use the Live Environment for conducting training.
- 3.4.37. The Supplier's Pre-Production Environments shall use Good Industry Practice test automation tools to reduce the cost of Testing defined in Order Schedule 13 (Implementation Plan and Testing) Part B (Testing).
- 3.4.38. The Supplier shall provide Users access to the Pre-Production Environment to support Testing in accordance with Order Schedule 13 (Implementation Plan and Testing) Part B (Testing).
- 3.4.39. The Supplier shall make available sufficient business and operational IT equipment (hardware and software), IT processing power, IT storage and IT bandwidth to deliver the Supplier Solution.
- 3.4.40. The Supplier shall manage and control the implementation activities and deployment event(s) of Software enhancements or New Releases to the Supplier Solution in accordance with ITIL Change Management and release and deployment management.

### **3.5. Product Backlog management**

- 3.5.1. The Supplier shall create and maintain the Product Backlog for the Operational Phase.
- 3.5.2. The Supplier shall undertake the necessary stakeholder engagement and user research required to populate the Product Backlog.
- 3.5.3. For each item listed in the Product Backlog, the Supplier shall provide an estimate of the effort required to develop each item in the Product Backlog. The Supplier shall prepare these estimates with appropriate care and skill, and on the basis of fair and reasonable assumptions.
- 3.5.4. Should the Buyer want to commission the implementation of an item or set of items from the Product Backlog this shall be agreed in accordance with the Variation Procedure.

### **3.6. Social value requirements**

- 3.6.1. The Supplier shall implement measures in order to support the following Social Value policy outcomes:

*Create new businesses, new jobs and new skills*

- (a) create opportunities for entrepreneurship and help new organisations to grow, supporting economic growth and business creation.
- (b) create employment and training opportunities particularly for those who face barriers to employment and/or who are located in deprived areas, and for people in industries with known skills shortages or in high growth sectors.
- (c) support educational attainment relevant to the contract, including training schemes that address skills gaps and result in recognised qualifications.

*Effective stewardship of the environment*

- (d) deliver additional environmental benefits in the performance of the contract including working towards net zero greenhouse gas emissions.
- (e) influence staff, suppliers, customers and communities through the delivery of the contract to support environmental protection and improvement.

*Tackle workforce inequality*

- (f) demonstrate action to identify and tackle inequality in employment, skills and pay in the contract workforce.
- (g) support in-work progression to help people, including those from disadvantaged or minority groups, to move into higher paid work by developing new skills relevant to the contract.
- (h) demonstrate action to identify and manage the risks of modern slavery in the delivery of the contract, including in the supply chain.

*Improve health and wellbeing*

- (i) demonstrate action to support health and wellbeing, including physical and mental health, in the contract workforce.
- (j) influence staff, suppliers, customers and communities through the delivery of the contract to support health and wellbeing, including physical and mental health.

**4. OPTIONAL SERVICES**

- 4.1. A list of requirements to be delivered as part of the Optional Services is shown in Annex D.

**5. BUYER RESPONSIBILITIES**

- 5.1. A list of responsibilities to be delivered by the Buyer are shown in Annex F.

## Annex A – Non-Functional Requirements

ID	Group	Requirement
		The Supplier shall ensure the Supplier System
NFR001	Compatibility	has a flexible and open software architecture which enables interoperability of components with third party systems.
NFR002	Compatibility	is designed and built to allow Users to access the Supplier System using the internet on their own device.
NFR003	Compatibility	is designed and built to operate correctly on the list of browsers and devices included within “Designing for different browsers and devices” (as set out in Annex E).
NFR004	Compatibility	is designed in accordance with the Standards (as set out in Annex E).
NFR005	Compatibility	uses APIs which are based on RESTful or JSON, conforming to “API technical and data standards” where relevant (as set out in Annex E).
NFR006	Functional suitability	has a back-up regime that complies with the requirements of Clause 14.3.
NFR007	Functional suitability	has Pre-Production Environments that are updated no later than seven (7) elapsed days to represent the relevant elements of the Live Environment and shall include any test harnesses, simulators and hardware/or software upgrades, or New Releases.
NFR008	Functional suitability	has suitable Pre-Production Environments for the purposes of Testing and training that simulate functionality of the Live Environment. For the avoidance of doubt, Pre-Production Environments are not required for more than four (4) hours over a single week within Normal Working Hours. Should additional provision be required, then this shall be agreed in accordance with the Variation Procedure.
NFR009	Functional suitability	minimises the use of Personal Data from the Live Environment within the Pre-Production Environments.

ID	Group	Requirement
		The Supplier shall ensure the Supplier System
NFR010	Functional suitability	retains daily back ups of Buyer Data for thirty-five (35) days.
NFR011	Functional suitability	is only able to utilise Imagery Sources in an instance of the Supplier System where the Defra Group Body in question has appropriate licensing rights to those Imagery Sources.
NFR012	Performance efficiency	has the initial storage capacity to support the: <ul style="list-style-type: none"> <li>(a) assessment of 3,000,000 Land Parcels and 125,000 Scheme Agreements<sup>1</sup>;</li> <li>(b) processing of Imagery Sources no less frequently than once a month during the Operational Phase, for the purposes of time series analysis;</li> <li>(c) storage of outputs from Markers for a period of no longer than three (3) years during the Operational Phase, for the purposes of time series analysis. For the avoidance of doubt, no outputs from Markers processed prior to the Order Start Date are required to be stored within the Supplier Solution.</li> </ul>
NFR013	Performance efficiency	has the minimum capacity to support the following number of concurrent Users: <ul style="list-style-type: none"> <li>(a) twenty-five (25) Users to have full authoritative access to the Supplier System;</li> <li>(b) one hundred (100) Users to have read only access to the Supplier System.</li> </ul>
NFR014	Performance efficiency	provides latency that is acceptable to Users (at a minimum, response time to be no greater than 3 seconds).
NFR015	Performance efficiency	shall be scalable, not requiring disproportionate effort to meet changing Buyer requirements.
NFR016	Portability	enables portability of Buyer Data (e.g. through export of a CSV file, via RESTful or JSON API).

<sup>1</sup> Currently comprising 75,000 Countryside Stewardship schemes, 5,000 Environmental Stewardship schemes, and 24,000 Sustainable Farming Incentive (SFI) schemes.

ID	Group	Requirement
		The Supplier shall ensure the Supplier System
NFR017	Portability	is supplied as a cloud-based software service, which will be hosted by the Buyer.
NFR018	Reliability	can be recovered with no more than twelve (12) hours data loss following a system failure (the “ <b>Recovery Point Objective</b> ” or “ <b>RPO</b> ”).
NFR019	Reliability	logs all commands generated by the software applications, modules, and Users.
NFR020	Reliability	produces audit logs.
NFR021	Reliability	uses a disaster recovery site which shall be kept at a safe distance in accordance with Good Industry Practice to eliminate the risk of both sites being made unavailable at the same time due to any unforeseen Disaster.
NFR022	Reliability	will be capable of ‘rolling back’ to a known working state should the introduction of a New Release be found to be causing Service Incidents and Problems in the Live Environment.
NFR023	Reliability	will have a maximum time to recovery (the “ <b>Recovery Time Objective</b> ” or “ <b>RTO</b> ”) of twelve (12) hours or less.
NFR024	Security	applies the ‘principle of least privilege’ and uses role-based access control (“ <b>RBAC</b> ”) to minimise visibility of Buyer Data.
NFR025	Security	enables Users to be assigned multiple access levels, multiple roles, and multiple permissions, and for those levels, roles, and permissions to be changed by the Buyer’s Super Users.
NFR026	Security	complies with the security requirements set out in Order Schedule 9 (Security).
NFR027	Security	disposes of Buyer Data in accordance with Order Schedule 9 (Security) Annex 1 (Baseline Security Requirements) Paragraph 3 (Data Processing, Storage, Management and Destruction).
NFR028	Security	enables effective use of RBAC.

ID	Group	Requirement
		The Supplier shall ensure the Supplier System
NFR029	Security	is not hosted outside the UK and Ireland without the prior written consent of the Buyer, which may be subject to conditions.
NFR030	Compatibility	will ensure no User side software installation is required, except where a mobile app requires installation on a Buyer device.
NFR031	Security	encrypts Buyer Data when in transit using Transport Layer Security (“TLS”) version 1.2 or higher.
NFR032	Security	encrypts Buyer Data when at rest.
NFR033	Security	complies with Buyer’s password policy (as set out in Annex E).
NFR034	Security	enables User accounts to be disabled when a User no longer requires access.
NFR035	Security	segregates data and instances of the Supplier Solution based on Defra Group Bodies.
NFR036	Usability	has a user interface for Users that works towards the principles contained in the accessibility standards set out in Annex E.
NFR037	Usability	is accessible to Users who have communication difficulties stemming from a protected characteristic as set out in the Equality Act, with the outcome not being inferior in terms of quality or standard.
NFR038	Usability	is capable of providing the required functionality through a single point of entry for Users, including integration with the Buyer’s identity management service for single sign-on purposes (currently based on Microsoft Entra ID).
NFR039	Usability	is intuitive, engaging, and easy to use, enabling Users to navigate the Supplier System with the fewest number of steps to accomplish the required operational task.

## Annex B – Functional Requirements

ID	Requirement
	The Supplier shall provide the capability
FUNC001	to visualise and query data through a single browser-based user interface for all Imagery Sources, analysed and derived data from Markers, and Scheme Options Information for Land Parcels.
FUNC002	to use Imagery Sources to identify Farm Habitats.
FUNC003	to monitor Land Use and Cover Changes with respect to farming activities.
FUNC004	to process Imagery Sources to automatically identify Time Series Statistics for a Land Parcel.
FUNC005	to produce Time Series Graphs to enable Users to conduct analysis of compliance with Scheme Agreements for a Land Parcel.
FUNC006	to produce Temporal Graphs to enable Users to conduct analysis of compliance with Scheme Agreements for a Land Parcel.
FUNC007	to produce Time Lapse Visuals to enable Users to conduct analysis of compliance with Scheme Agreements for a Land Parcel.
FUNC008	to monitor Land Cover Changes across different time periods.
FUNC009	to extract Mowing Markers from Imagery Sources.
FUNC010	to extract Harvest Markers from Imagery Sources.
FUNC011	to extract Homogeneity Markers from Imagery Sources.
FUNC012	to extract Bare Soil Markers from Imagery Sources <sup>2</sup> , through integration of the Buyer's Bare Soil Marker.

<sup>2</sup> Please see RESP018.

ID	Requirement
	The Supplier shall provide the capability
FUNC013	to extract Surface Water Markers from Imagery Sources <sup>3</sup> , through integration of the Buyer's Surface Water Marker.
FUNC014	to produce a confidence rating for each Marker generated, indicating the anticipated accuracy of the Marker extracted from Imagery Sources as if it were validated through the use of Ground Truth Data.
FUNC015	to visualise the outputs for Markers.
FUNC016	to visualise the statistics (associated with compliance with Scheme Agreements for a Land Parcel) extracted from Markers attached to a Land Parcel.
FUNC017	to Publish outputs from the Supplier System to Buyer Systems (e.g. Spatial Data Mart).
FUNC018	to Publish outputs for Markers using OGC Services.
FUNC019	to Publish outputs for Markers, being exportable from the Supplier System in raster formats (e.g. geotiff).
FUNC020	to Publish outputs for statistics extracted from Markers attached to a Land Parcel as a table and/or vector-based file formats.
FUNC021	to monitor and gain insights into compliance with Scheme Agreements (and any associated Scheme Options Information) for a Land Parcel on a configurable basis.
FUNC022	to indicate the severity of any anticipated non-compliance with a Scheme Agreement (and any associated Scheme Options Information) for a Land Parcel through the use of a severity scale (e.g. red, amber, green).
FUNC023	for Field Officers to use a browser-based user interface or mobile app for the Supplier Solution on mobile devices, laptops, and tablets.
FUNC024	for Users to add their own Imagery Sources and Ground Truth Data for a Land Parcel.

<sup>3</sup> Please see RESP018.

ID	Requirement
	<b>The Supplier shall provide the capability</b>
FUNC025	for Users to produce management reports, including (but not limited to) reports measuring the type and volume of Markers extracted and the type and volume of anticipated non-compliance with a Scheme Agreement for a Land Parcel.
FUNC026	to minimise the risk of false positives and false negatives.
FUNC027	for the Buyer's staff to develop Markers in a Pre-Production Environment (in an equivalent manner to how the Supplier's staff are able to develop Markers in a Pre-Production Environment), subject to NFR008. For the avoidance of doubt, if the Buyer requires the Marker to be available in the Live Environment then this shall be agreed in accordance with the Variation Procedure and subject to Paragraph 3.4.21.

## Annex C – Integration Requirements

ID	Requirement <sup>4</sup>
	The Supplier shall provide the capability
INT001	to Ingest Planet Scope and Planet Fusion imagery <sup>5</sup> .
INT002	to Ingest Sentinel 1 and Sentinel 2 imagery.
INT003	to Ingest Aerial Photography of Great Britain imagery.
INT004	to Ingest Environment Agency LiDAR imagery <sup>6</sup> , limited to 2D products.
INT005	to Ingest Land Cover Information from the Spatial Data Mart for each Land Parcel.
INT006	to Ingest Land Parcel Information from the Spatial Data Mart.
INT007	to Ingest Scheme Options Information from the Spatial Data Mart for each Land Parcel.
INT008	to Ingest the Crop Map of England (“ <b>CROME</b> ”) <sup>7</sup> vector dataset.

<sup>4</sup> Please see RESP019.

<sup>5</sup> <https://docs.sentinel-hub.com/api/latest/api/process/>

<sup>6</sup> <https://environment.data.gov.uk/searchresults?query=lidar&searchtype=&orderby=default&pagesize=20&page=1>

<sup>7</sup> <https://environment.data.gov.uk/dataset/a27312b5-d6c9-4710-ad5e-382d727c1b05>

**Annex D – Optional Services**

<b>ID</b>	<b>Requirement</b>
	<b>The Supplier shall provide the capability</b>
OPT001	to extract new Markers from Imagery Sources (e.g. Land Cover marker (grassland types, fallow legume, winter cover crop), habitat marker (buffer strip, wetlands, nesting plots), tillage marker etc.).
OPT002	to Ingest new Imagery Sources.
OPT003	to provision new Imagery Sources.
OPT004	to develop new data products derived from Imagery Sources.
OPT005	to integrate the Supplier Solution with other Buyer Systems.
OPT006	to Ingest the Buyer's Hedges Dataset.

## Annex E – Standards

- 1.1. The Supplier shall comply with the Buyer's Standards (or their equivalents) and Good Industry Practice guidelines set out below, in addition to those Standards set out in DPS Schedule 1 (Specification).
- 1.2. For the avoidance of doubt, unless stated otherwise elsewhere in the Order Contract, certification against any of the Standards in this Annex E is not required.
- 1.3. The Buyer may, acting reasonably, grant dispensation from a Standard (in whole or in part) upon written request from the Supplier.

ID	Category	Title	Internet link
STAN001	Accessibility	ISO/IEC 13066-1	<a href="https://www.iso.org/standard/53770.html">https://www.iso.org/standard/53770.html</a>
STAN002	Accessibility	World Wide Web Consortium (W3C) Web Accessibility Initiative (WAI) Web Content Accessibility Guidelines (WCAG) 2.2 Conformance Level AA	<a href="https://www.w3.org/WAI/WCAG2AA-Conformance">https://www.w3.org/WAI/WCAG2AA-Conformance</a>
STAN003	Architecture	TOGAF	<a href="https://www.opengroup.org/togaf/10thedition">https://www.opengroup.org/togaf/10thedition</a>
STAN004	Design	Government Design Principles	<a href="https://www.gov.uk/guidance/government-design-principles">https://www.gov.uk/guidance/government-design-principles</a>
STAN005	Digital services	API technical and data standards	<a href="https://www.gov.uk/guidance/gds-api-technical-and-data-standards">https://www.gov.uk/guidance/gds-api-technical-and-data-standards</a>
STAN006	Digital services	Designing for different browsers and devices	<a href="https://www.gov.uk/service-manual/technology/designing-for-different-browsers-and-devices">https://www.gov.uk/service-manual/technology/designing-for-different-browsers-and-devices</a>
STAN007	Geospatial	Best practice guidance and tools for managing geospatial data	<a href="https://www.gov.uk/government/collections/best-practice-guidance-and-tools-for-geospatial-data-managers">https://www.gov.uk/government/collections/best-practice-guidance-and-tools-for-geospatial-data-managers</a>
STAN008	Geospatial	Identifying property and street information	<a href="https://www.gov.uk/government/publications/open-standards-for-government/identifying-">https://www.gov.uk/government/publications/o</a> <a href="https://www.gov.uk/government/publications/open-standards-for-government/identifying-">pen-standards-for-government/identifying-</a>

ID	Category	Title	Internet link
			<a href="#">property-and-street-information</a>
STAN009	Geospatial	National geospatial data standards register	<a href="https://www.gov.uk/government/publications/uk-geospatial-data-standards-register/national-geospatial-data-standards-register">https://www.gov.uk/government/publications/uk-geospatial-data-standards-register/national-geospatial-data-standards-register</a>
STAN010	Geospatial	OGC Standards	<a href="https://www.ogc.org/docs/is">https://www.ogc.org/docs/is</a>
STAN011	IT Service Management	ISO 10007	<a href="https://www.iso.org/standard/70400.html">https://www.iso.org/standard/70400.html</a>
STAN012	IT Service Management	ISO 22313	<a href="https://www.iso.org/standard/75107.html">https://www.iso.org/standard/75107.html</a>
STAN013	IT Service Management	ISO/IEC 20000-1	<a href="https://www.iso.org/standard/70636.html">https://www.iso.org/standard/70636.html</a>
STAN014	IT Service Management	ISO/IEC 20000-2	<a href="https://www.iso.org/standard/72120.html">https://www.iso.org/standard/72120.html</a>
STAN015	IT Service Management	ITIL	<a href="https://www.axelos.com/certifications/itil-service-management/">https://www.axelos.com/certifications/itil-service-management/</a>
STAN016	IT Service Management	Service Run Manual	Refer to Data Room.
STAN017	People	Agile delivery	<a href="https://www.gov.uk/service-manual/agile-delivery">https://www.gov.uk/service-manual/agile-delivery</a>
STAN018	People	Digital, Data and Technology Profession Capability Framework	<a href="https://www.gov.uk/government/collections/digital-data-and-technology-profession-capability-framework">https://www.gov.uk/government/collections/digital-data-and-technology-profession-capability-framework</a> <a href="https://sfia-online.org/en/tools-and-">https://sfia-online.org/en/tools-and-</a>

ID	Category	Title	Internet link
			<a href="https://www.gov.uk/government/publications/resources/standard-industry-skills-profiles/uk-government-ddat-roles/sfia-skills-profiles-for-uk-ddat-roles">resources/standard-industry-skills-profiles/uk-government-ddat-roles/sfia-skills-profiles-for-uk-ddat-roles</a>
STAN019	People	Travel and subsistence policy	Refer to Data Room.
STAN020	Scheme options	Countryside Stewardship Programme	<a href="https://www.gov.uk/guidance/countryside-stewardship-get-funding-to-protect-and-improve-the-land-you-manage">https://www.gov.uk/guidance/countryside-stewardship-get-funding-to-protect-and-improve-the-land-you-manage</a>
STAN021	Scheme options	Sustainable Farming Incentive (SFI)	<a href="https://farming.campaign.gov.uk/">https://farming.campaign.gov.uk/</a>
STAN022	Security	Cyber Essentials PLUS	<a href="https://www.ncsc.gov.uk/cyberessentials/overview">https://www.ncsc.gov.uk/cyberessentials/overview</a>
STAN023	Security	ISO/IEC 22301	<a href="https://www.iso.org/standard/75106.html">https://www.iso.org/standard/75106.html</a>
STAN024	Security	ISO/IEC 27001	<a href="https://www.iso.org/standard/27001">https://www.iso.org/standard/27001</a>
STAN025	Security	NCSC Bulk Data Principles	<a href="https://www.ncsc.gov.uk/guidance/protecting-bulk-personal-data-main">https://www.ncsc.gov.uk/guidance/protecting-bulk-personal-data-main</a>
STAN026	Security	NCSC Cloud Security Principles	<a href="https://www.ncsc.gov.uk/guidance/implementing-cloud-security-principles">https://www.ncsc.gov.uk/guidance/implementing-cloud-security-principles</a>
STAN027	Security	NCSC Security Design Principles for Digital Services	<a href="https://www.ncsc.gov.uk/guidance/security-design-principles-digital-services-main">https://www.ncsc.gov.uk/guidance/security-design-principles-digital-services-main</a>
STAN028	Security	Password policy	Refer to Data Room.
STAN029	Security	Transport Layer Security (TLS) version 1.2	<a href="https://www.gov.uk/government/publications/email-security-standards/transport-layer-security-tls">https://www.gov.uk/government/publications/email-security-standards/transport-layer-security-tls</a>

ID	Category	Title	Internet link
STAN030	Sustainability	25 Year Environment Plan	<a href="https://www.gov.uk/government/publications/25-year-environment-plan">https://www.gov.uk/government/publications/25-year-environment-plan</a>
STAN031	Sustainability	Defra group sustainable information technology (IT) strategy	<a href="https://www.gov.uk/government/publications/defra-group-sustainable-information-technology-it-strategy">https://www.gov.uk/government/publications/defra-group-sustainable-information-technology-it-strategy</a>
STAN032	Sustainability	Greening Government Commitments	<a href="https://www.gov.uk/government/publications/greening-government-commitments-2021-to-2025">https://www.gov.uk/government/publications/greening-government-commitments-2021-to-2025</a>
STAN033	Sustainability	Greening government: ICT and digital services strategy 2020-2025	<a href="https://www.gov.uk/government/publications/greening-government-ict-and-digital-services-strategy-2020-2025/greening-government-ict-and-digital-services-strategy-2020-2025">https://www.gov.uk/government/publications/greening-government-ict-and-digital-services-strategy-2020-2025/greening-government-ict-and-digital-services-strategy-2020-2025</a>
STAN034	Sustainability	ISO 50001 Energy Management	<a href="https://www.iso.org/iso-50001-energy-management.html">https://www.iso.org/iso-50001-energy-management.html</a>
STAN035	Technology	Defra software development standards	<a href="https://github.com/DEFRA/software-development-standards">https://github.com/DEFRA/software-development-standards</a>
STAN036	Technology	JSON	<a href="https://www.json.org/json-en.html">https://www.json.org/json-en.html</a>
STAN037	Technology	Manage your software configuration	<a href="https://www.gov.uk/service-manual/technology/manage-your-software-configuration">https://www.gov.uk/service-manual/technology/manage-your-software-configuration</a>
STAN038	Technology	Managing software dependencies	<a href="https://www.gov.uk/service-manual/technology/managing-software-dependencies">https://www.gov.uk/service-manual/technology/managing-software-dependencies</a>

ID	Category	Title	Internet link
STAN039	Technology	Open Standards Principles	<a href="https://www.gov.uk/government/publications/open-standards-principles/open-standards-principles">https://www.gov.uk/government/publications/open-standards-principles/open-standards-principles</a>
STAN040	Technology	OpenAPI Specification	<a href="https://swagger.io/specification/">https://swagger.io/specification/</a>
STAN041	Technology	Technology Code of Practice	<a href="https://www.gov.uk/service-manual/technology/code-of-practice.html">https://www.gov.uk/service-manual/technology/code-of-practice.html</a>

## Annex F – Buyer responsibilities

- 1.1 The responsibilities of the Buyer set out in this Annex F shall constitute the Buyer’s responsibilities under this Contract (together the “**Buyer Responsibilities**”). Any obligations of the Buyer in Order Schedule 4 (Order Tender) shall not be Buyer Responsibilities and the Buyer shall have no obligation to perform any such obligations unless they are specifically stated in this Annex F.
- 1.2 The responsibilities specified within this Annex F shall be provided to the Supplier free of charge, unless otherwise agreed between the Parties.

ID	Responsibility
	The Buyer shall
RESP001	use its reasonable endeavours to provide the Supplier with access to appropriate members of the Buyer’s staff, as such access is reasonably requested by the Supplier in order for the Supplier to discharge its obligations throughout the Order Contract Period.
RESP002	provide sufficient and suitably qualified staff to fulfil the Buyer’s roles and duties under this Order Contract.
RESP003	use its reasonable endeavours to provide such documentation, data and/or other information that the Supplier reasonably requests that is necessary to perform its obligations under the terms of this Order Contract provided that such documentation, data and/or information is available to the Buyer and is authorised for release by the Buyer.
RESP004	procure for the Supplier such agreed access and use of the Buyer Premises (as a licensee only) and facilities (including relevant IT systems) as is reasonably required for the Supplier to comply with its obligations under this Order Contract, such access to be provided during Normal Working Hours or as otherwise agreed by the Buyer (such agreement not to be unreasonably withheld or delayed).
RESP005	ensure its staff attend training courses provided by the Supplier to timescales agreed with the Supplier.
RESP006	provide the Training Needs Analysis.
RESP007	provide the interface specifications to the Buyer System.
RESP008	provide access to relevant parts of the Buyer System to enable the Supplier to conduct testing, access Buyer Assets, and other similar activities.

ID	Responsibility
	The Buyer shall
RESP009	facilitate meetings between the Supplier, the Buyer and Other Suppliers in order to agree technical interfaces between the Supplier Solution and the Buyer System, and IT Service Management processes.
RESP010	provide and maintain the list of the Buyer's staff who are authorised by the Buyer to access certain parts of the Supplier Solution.
RESP011	<p>provide the following services relating to AWS cloud hosting, where it is agreed that the Supplier Solution shall be hosted by the Buyer in the Buyer's AWS cloud hosting environment:</p> <ul style="list-style-type: none"> <li>• manage the AWS subscription and centralised billing, including tag and naming standards and policies for billing;</li> <li>• deploy the subscription into the appropriate Defra management group and EntraID tenant;</li> <li>• onboard the subscription to AWS Control Tower;</li> <li>• provide security controls for the perimeter;</li> <li>• provide high-level network foundations;</li> <li>• provide multiple availability zones (where applicable);</li> <li>• provide administrative identities and ownership roles;</li> <li>• provide ingress and egress pan-Defra services;</li> <li>• deploy standard Defra baseline audit policies and controls.</li> </ul>
RESP012	issue communications to Users that relate to implementation during the Implementation Phase.
RESP013	provide First Line Support for the Supplier Solution.
RESP014	provide end user compute services, including device management, identity management (for single sign-on purposes), network connectivity, and certification management, for any devices used by Users.

ID	Responsibility
	The Buyer shall
RESP015	participate in the Testing and review processes set out in Order Schedule 13 (Implementation Plan and Testing).
RESP016	provide functional support of the Supplier Solution to Users who are not Super Users.
RESP017	use its reasonable endeavours to provide access to the Buyer's staff in order to support the provision of Ground Truth Data.
RESP018	provide the Buyer's algorithm for the Bare Soil Marker and Surface Water Marker which were developed by the Buyer's staff prior to the Order Start Date.
RESP019	maintain the commercial agreements required, in order for the Supplier to Ingest the relevant Buyer Data and third party data relating to INT001, INT003, INT005, INT006, and INT007 in Annex C.