DATA SERVICES PLATFORM 3 (DSP3)

**SCHEDULE 2.1**

SERVICES DESCRIPTION

1. **INTRODUCTION**
	1. **General**
		1. This schedule specifies the intended scope of the Services to be provided by the Supplier under this Agreement and a description of what each of the Services entails.
		2. The requirements for the Services have been categorised under the following headings:
2. Implementation Services, comprising the Transition Services (set out in paragraph 2.1), and the Transformation Services (set out in paragraph 2.2);
3. Operational Services, comprising the elements as set out in paragraph 3; and
4. Optional Services, comprising the elements as set out in paragraph 4.
	1. **Scope**
		1. The overall scope for the Services is to provide the following core DSP functionality for End Users, including:
5. provision of a data sharing platform;
6. Linked Data services;
7. Metadata management;
8. creation and maintenance of any Apps built on DSP data;
9. provision of a Knowledgebase;
10. data Access Management and rights management;
11. domain registration and URL proxy management;
12. IT Service Management (in accordance with ITIL v4) for the DSP platform; and
13. fulfilment of the applicable roles within the UK government's digital, data and technology professional capability framework.
	* 1. Additionally, the Authority requires a platform that leverages investment made in the DSP to date and enables future flexibility across a convergent platform for managing Defra Group data and information systems and services. This may include the implementation of Optional Services or future requirements, including (but not limited to):
14. the Supplier Solution must have a product roadmap which includes functionality readily available in the proposed product suite beyond the functionality currently stated in the Agreement that the Authority may wish to implement via the Change Control Procedure;
15. the DSP may be required to exchange data and enable interoperability across new data and information systems and services in near real-time (e.g. by means of an open API, enabling unfettered access to all data wherever it is stored);
16. the DSP may be required to support the management of new data and information systems and services for other Defra Group bodies;
17. the DSP may be required (subject to user research) to develop and support new Datasets, APIs, Apps and digital services in order to support the wider knowledge economy;
18. the DSP may be required to utilise capabilities in the product roadmap that could be used to replace other (aged) Defra Group systems (in whole or in part);
19. the DSP may be required to utilise capabilities in the product roadmap to deliver a platform that could be used to further develop the DSP interactive mapping capability for Spatial services and data visualisation; and
20. the Supplier must propose new ideas, innovations, and service improvements via a bi-annual Continuous Improvement Plan that the Authority may wish to implement via the Change Control Procedure.
21. **IMPLEMENTATION SERVICES**
	1. **Transition Services**
		1. The Supplier shall provide the Transition Services necessary for the Supplier to:
22. provide the Operational Services required from Achievement of the ATP1 Milestone (as set out in paragraph 3.1); and
23. meet the Test Success Criteria for each Test relating to Milestones INT1, INT2, INT3, ATP1, and CPP1 as set out in Schedule 6.2 (*Testing Procedures*) Annex 4 (*Test Success Criteria*).
	* 1. The ATP1 Milestone Date shall be no later than eight (8) months from the Effective Date and the CPP1 Milestone Date shall be three (3) months from Achievement of the ATP1 Milestone.
		2. The Supplier shall work with the Outgoing Supplier to ensure:
24. a smooth transfer of operations from the Outgoing Supplier to the Supplier;
25. no loss or corruption of Authority Data;
26. the transfer of “open” work-flow items (e.g. outstanding IT Service Management requests); and
27. End Users are kept informed of the changes.
	* 1. The Supplier shall support the Authority in producing an End User communications campaign that shall enable the following objectives to be achieved:
28. notify End Users who have completed the User Registration process that the management of their accounts is being transferred to the Supplier;
29. obtain any necessary permissions from the End User; and
30. inform End Users of any relevant changes to the manner in which the Services are being provided.
	* 1. The Supplier shall work with the Outgoing Supplier to agree the detailed sequence of Transition Services and activities to be documented in the Outgoing Suppliers Exit Plan.
		2. The Supplier shall obtain all existing assets and information that the Authority has obtained from the Outgoing Supplier which are necessary for the Supplier to provide the Operational Services required from the ATP1 Milestone (as set out in paragraph 3.1).
		3. The Supplier shall put in place all necessary arrangements in order to operate and maintain the Software set out in Annex S (the **“Transferred Software”**) from the ATP1 Milestone.
		4. The Supplier shall ensure URLs and API Endpoints used in the Legacy DSP are maintained and transferred to the Supplier Solution by the ATP1 Milestone. For the avoidance of doubt, API Endpoints derived from ArcGIS or Esri products are not required to be maintained and transferred to the Supplier Solution, unless they are required in order to operate any of the Apps (e.g. Rural Payments Agency Land API) until the CPP2 Milestone.
		5. Prior to the ATP1 Milestone, the Supplier shall build prototypes of the Supplier Solution (**“Alpha”**) and shall Test the Supplier Solution with a limited number of End Users prior to full deployment (**“Private Beta”**).
		6. The Supplier shall plan and implement a cutover to the Operational Services delivered from the ATP1 Milestone (as set out in paragraph 3.1) that minimises the disruption incurred by End Users.
		7. The Supplier shall provide Early Life Support to support End Users in the first use of the functionality introduced from the ATP1 Milestone Date for a period of twenty (20) Working Days during Operational Hours.
	1. **Transformation Services**
		1. The Supplier shall provide the Transformation Services necessary for the Supplier to:
31. provide the Operational Services required from Achievement of the ATP2 Milestone (as set out in paragraph 3.1); and
32. meet the Test Success Criteria for each Test relating to Milestones INT4, INT5, ATP2, and CPP2 as set out in Schedule 6.2 (*Testing Procedures*) Annex 4 (*Test Success Criteria*).
	* 1. The ATP2 Milestone Date shall be no later than nine (9) months from Achievement of the ATP1 Milestone and the CPP2 Milestone Date shall be three (3) months from Achievement of the ATP2 Milestone.
		2. The Supplier shall ensure URLs and API Endpoints used in the Legacy DSP continue to be used in the Supplier Solution. For the avoidance of doubt, API Endpoints derived from ArcGIS or Esri products are not required to be maintained and transferred to the Supplier Solution, unless they are required in order to operate the Apps (e.g. Rural Payments Agency Land API) until the CPP2 Milestone.
		3. Prior to the ATP2 Milestone, the Supplier shall build an Alpha and Test the Supplier Solution through a Private Beta.
		4. The Supplier shall plan and implement a cutover from the Operational Services delivered prior to the ATP2 Milestone to the Operational Services delivered from the ATP2 Milestone (as set out in paragraph 3.1) that minimises the disruption incurred by End Users.
		5. The Supplier shall provide Early Life Support to support End Users in the first use of the functionality introduced from the ATP2 Milestone Date for a period of twenty (20) Working Days during Operational Hours.
33. **OPERATIONAL SERVICES**
	1. **Introduction**
		1. The following sections of the Operational Services shall be provided from Achievement of the ATP1 Milestone:
34. Annex A – Non-Functional Requirements;
35. Paragraph 3.4 – Service management requirements;
36. Paragraph 3.5 – Social Value requirements.
	* 1. The following sections of the Operational Services shall be provided no later than Achievement of the ATP1 Milestone or Achievement of the ATP2 Milestone, as indicated in the column to the right of the requirement:
37. Annex B – General;
38. Annex C – End User Interface;
39. Annex D – Discovery and Search;
40. Annex E – Guidance and Feedback;
41. Annex F – Publishing;
42. Annex G – Access Management;
43. Annex J – Usage Reporting;
44. Annex L – Linked Data;
45. Annex M – Data Services;
46. Annex N – Metadata Catalogue;
47. Annex Q – Linked Data Apps;
48. Annex R – Non-Linked Data Apps.
	1. **Non-functional requirements**
		1. The non-functional requirements are set out in Annex A.
	2. **Functional requirements**
		1. The functional requirements are set out in Annex B through to Annex N, Annex Q and Annex R.
	3. **Service management requirements**

*General management*

* + 1. The Supplier shall undertake all the IT Service Management general management practices set out in ITIL 4 and the Standards in Schedule 2.3 (*Standards*) paragraph 7 (*Service Management Software & Standards*) in order to deliver the Operational Services.
		2. The Supplier shall provide training on all relevant elements of the Supplier Solution to Internal Users throughout the Term.
		3. The Supplier shall provide refresher training to Internal Users with each Upgrade, Update or New Release to the Supplier Solution or its functionality.
		4. The Supplier shall provide Documentation to accompany all training courses, covering all relevant aspects of the course material.
		5. The Supplier shall provide details to the Authority every month on End User satisfaction in accordance with the GDS Service Manual.
		6. The Supplier shall maintain the Deliverables identified in Schedule 6.2 (*Testing Procedures*) Annex 4 (*Test Success Criteria*) throughout the Term to ensure they are consistent with the current version of the Supplier Solution.
		7. The Supplier shall ensure its continual improvement processes and procedures incorporate the requirements of Clause 8 (*Services Improvement*).
		8. The Supplier shall ensure its measurement and reporting processes and procedures incorporate the requirements of Schedule 2.2 (*Performance Levels*).
		9. The Supplier shall ensure its information security management processes and procedures incorporate the requirements of Schedule 2.4 (*Security Management*).
		10. The Supplier shall ensure its service validation and testing processes and procedures incorporate the requirements of Schedule 6.2 (*Testing Procedures*).
		11. The Supplier shall ensure its financial management processes and procedures incorporate the requirements of Schedule 7.4 (*Financial Distress*) and Schedule 7.5 (*Financial Reports and Audit Rights*).
		12. The Supplier shall ensure its knowledge management and records management processes and procedures incorporate the requirements of Schedule 7.5 (*Financial Reports and Audit Rights*) Part B (*Financial Reports*), Schedule 8.4 (*Reports and Records Provisions*) and Schedule 8.5 (Exit Management) paragraph 2 (*Obligations During the Term to Facilitate Exit*).
		13. The Supplier shall ensure its governance processes and procedures incorporate the requirements of Schedule 8.1 (*Governance*).

*IT Service Management*

* + 1. The Supplier shall undertake all the IT Service Management service management practices set out in ITIL 4 and the Standards in Schedule 2.3 (*Standards*) paragraph 7 (*Service Management Software & Standards*) in order to deliver the Operational Services.
		2. The Supplier shall provide a UK-located Help Desk aligned to ITIL 4 practices, accessible as a minimum via phone and email, which shall serve as a single point of contact for End Users for all queries relating to support of the Supplier Solution. For the avoidance of doubt, phone contact will only be available to Internal Users.
		3. The Supplier shall have an appropriate number of suitably skilled and experienced Supplier Personnel to operate the Help Desk during Operational Hours. For the avoidance of doubt, should additional Supplier Personnel be required to operate the Help Desk outside of Operational Hours, then this shall be agreed in accordance with the Change Control Procedure and be charged in accordance with the principles set out in Schedule 7.1 (*Charges and Invoicing*). The Authority will notify the Supplier of any such requirement for additional Supplier Personnel with five (5) Working Days advance notification.
		4. The Supplier shall store and maintain records of all communications to the Help Desk 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 End User details.
		5. The Supplier shall operate an access control regime for the Supplier System (as set out in Schedule 2.4 (*Security Management*) Annex 1 paragraph 5 (*Identify, Authentication and Access Control*)) and notify End Users within two (2) Working Days of any such access being granted.
		6. The Supplier shall inform the Authority of any Permitted Maintenance with ten (10) Working Days advance notification, in accordance with the Maintenance Schedule and Clause 9.4 to 9.6 (*Maintenance*). The Suppler shall facilitate a go/no-go discussion with the Authority on the day of the Permitted Maintenance so that major incidents (such as flooding or a disease outbreak) can be considered.
		7. The Supplier shall undertake IT Change Management in accordance with ITIL 4.
		8. The Supplier shall monitor and manage the Supplier System.
		9. 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 System.
		10. The Supplier shall ensure that all Service Incidents, Problems and any associated Upgrades, Updates or New Releases are logged with the Help Desk.
		11. The Supplier shall provide configuration documentation and release notes for each Upgrade, Update or New Release.
		12. The Supplier shall operate an ITSM Toolset in delivery of its IT Service Management activities and provide access to the ITSM Toolset to the Authority.
		13. 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 Performance Indicator.
		14. The Supplier shall ensure that the ITSM Toolset provides the capability to log and track and report issues, questions and End User feedback in a structured and consistent format. The ITSM Toolset shall be capable of integration with the Authority’s IT service management tools (currently ServiceNow). For the avoidance of doubt, if the integration of the ITSM Toolset with the Authority’s IT service management tools is required then this shall be added to the Product Backlog.
		15. The Supplier shall ensure that the ITSM Toolset provides the capability to mass notify End Users (who have completed the User Registration process) as and when required (e.g. in the event of a Priority 1 Service Incident).
		16. The Supplier shall keep all the Supplier Solution components within support in accordance with Clause 5.5(c).
		17. The Supplier shall ensure its IT asset management processes and procedures incorporate the requirements of Clause 9.4 to 9.6 (*Maintenance*), Clause 20 (*Open Source Publication*), and Schedule 5 (*Software*) paragraph 1 (*The Software*).
		18. As part of its IT asset management processes and procedures, the Supplier shall create and maintain a list of all Apps developed during the Term (the **“Application Register”**).
		19. The Supplier shall ensure its service continuity management processes and procedures incorporate the requirements of Schedule 8.6 (*Service Continuity Plan*).

*Technical management*

* + 1. The Supplier shall undertake all the IT Service Management technical management practices set out in ITIL 4 and the Standards in Schedule 2.3 (*Standards*) paragraph 7 (*Service Management Software & Standards*) in order to deliver the Operational Services.
		2. The Supplier shall provide Pre-production Environments that simulate functionality of the Live Environment.
		3. The Supplier shall maintain a minimum of one (1) Pre-production Environment, to support development, Testing and training, that is distinct and separate from the Live Environment. For the avoidance of doubt, the Pre-production Environment(s) will only be required within Operational Hours and the Authority will provide five (5) Working Days advance notification.
		4. The Supplier shall conduct training in the Pre-production Environments and will not use the Live Environment for conducting training.
		5. The Supplier’s Pre-production Environments shall be updated to represent the relevant elements of the Live Environment and shall include any test harnesses, simulators and hardware/or software Upgrades, Updates or New Releases required in accordance with the Test Strategy.
		6. The Supplier’s Pre-production Environments shall use Good Industry Practice test automation tools to reduce the cost of Testing defined in Schedule 6.2 (*Testing Procedures*).
		7. The Supplier’s Pre-production Environments shall be correctly configured and available on an ongoing basis from the date of the first Test for the testing activities defined in the Test Strategy.
		8. The Supplier’s Pre-production Environments shall be maintained so as to generate consistent results from Tests (in accordance with the Test Strategy) that will allow new outputs to be comparable to baseline results.
		9. The Supplier shall provide End Users access to the Pre-production Environments to support Testing in accordance with Schedule 6.2 (*Testing Procedures*).
		10. 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 Services.
		11. The Supplier shall review the storage requirements in NF74 on an annual basis in each Contract Year and advise the Authority if any adjustments are required. For the avoidance of doubt, any adjustments shall be agreed in accordance with the Change Control Procedure and be charged in accordance with the principles set out in Schedule 7.1 (*Charges and Invoicing*).
		12. The Supplier will implement and deploy Software enhancements and fixes to the Supplier Solution in accordance with ITIL 4.

*Product Backlog management*

* + 1. The Supplier shall create and maintain the Product Backlog.
		2. The Supplier shall undertake the necessary stakeholder engagement and user research required to populate the Product Backlog.
		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.
		4. The Authority, acting reasonably, will provide a prioritisation for each item in the Product Backlog as part of the Change Management Board.
		5. Should the Authority want to commission the implementation of an item or set of items from the Product Backlog (each a **“Development Project”**), this shall be agreed in accordance with the Change Control Procedure. The success criteria for each Development Project (the **“Definition of Done”**) and the identity of the Authority Representative with responsibility for the Development Project (the **“Product Owner”**) shall be documented in the relevant Change Request. The agreed number of Severity Level 3, 4 and 5 Test Issues for each Development Project and the time period for resolving any remaining Test Issues will also be set out in the relevant Change Request.
		6. For the avoidance of doubt, each Development Project shall align with the scope set out in paragraph 1.2 and (unless otherwise agreed by the Authority in writing in the relevant Change Request) each Development Project shall:
1. comply with the non-functional requirements set out in Annex A;
2. be incorporated into the IT Service Management regime set out in paragraph 3.4, upon completion of the Development Project until the expiry of the Term;
3. be incorporated into the performance monitoring regime set out in Schedule 2.2 (*Performance Levels*), upon completion of the Development Project until the expiry of the Term;
4. comply with the standards set out in Schedule 2.3 (*Standards*);
5. be incorporated into the security monitoring regime, and comply with the associated security requirements, set out in Schedule 2.4 (*Security Management*), upon completion of the Development Project until the expiry of the Term;
6. be designed, built, and tested in accordance with the principles set out in the Test Strategy;
7. have an associated Test Plan, Test Specification, and Test Report (as set out Schedule 6.2 (*Testing Procedures*)) if requested in the relevant Change Request;
8. be charged in accordance with the principles set out in Schedule 7.1 (*Charges and Invoicing*);
9. produce Documentation which is deposited in the Virtual Library and incorporated into the knowledge management and records management processes and procedures outlined in Schedule 8.4 (*Reports and Records Provisions*) and Schedule 8.5 (Exit Management) paragraph 2 (*Obligations During the Term to Facilitate Exit*), upon completion of the Development Project until the expiry of the Term;
10. be incorporated into any annual update to the Exit Plan as set out in Schedule 8.5 (*Exit Management*) paragraph 5 (*Exit Plan*), upon completion of the Development Project until the expiry of the Term; and
11. be incorporated into the service continuity planning regime set out in Schedule 8.6 (*Service Continuity Planning*), upon completion of the Development Project until the expiry of the Term.
	1. **Social Value requirements**
		1. The Supplier shall implement measures in order to support the following Social Value policy outcomes:

*Create new businesses, new jobs and new skills*

1. create opportunities for entrepreneurship and help new organisations to grow, supporting economic growth and business creation.
2. 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.
3. support educational attainment relevant to the contract, including training schemes that address skills gaps and result in recognised qualifications.

*Effective stewardship of the environment*

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

*Tackle workforce inequality*

1. demonstrate action to identify and tackle inequality in employment, skills and pay in the contract workforce.
2. 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.
3. 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*

1. demonstrate action to support health and wellbeing, including physical and mental health, in the contract workforce.
2. influence staff, suppliers, customers and communities through the delivery of the contract to support health and wellbeing, including physical and mental health.
3. **OPTIONAL SERVICES**
	1. A list of requirements to be delivered as part of the Optional Services is shown in Annex O and Annex P.

**Annex A – Non-Functional Requirements**

| **Group** | **ID** | **Requirement** |
| --- | --- | --- |
| Compatibility |  | The Supplier shall ensure that any APIs within the Supplier Solution are based on RESTful or JSON conforming to [API technical and data standards (v2 - 2019) - GOV.UK](https://www.gov.uk/guidance/gds-api-technical-and-data-standards) where relevant (in accordance with Schedule 2.3 (*Standards*)). |
| Compatibility |  | The Supplier shall ensure that the Supplier Solution complies with industry open standards. |
| Compatibility |  | The Supplier shall ensure that the Supplier Solution exposes its main functions as services. |
| Compatibility |  | The Supplier shall ensure that the Supplier Solution exposes, uses and integrates services provided by other (external) systems. |
| Compatibility |  | The Supplier shall provide a service that can connect with other systems (internal and external) so that other systems can use Authority Data directly without the need for unwieldy export-import activities. |
| Compatibility |  | The Supplier shall ensure that the Supplier Solution has a flexible and open software architecture. |
| Compatibility |  | The Supplier shall ensure that the Supplier Solution has provisions for legacy integration using mechanisms such as an adapter framework. |
| Compatibility |  | The Supplier shall ensure that the Supplier Solution modules provide services that are published using the Open API Specification (in accordance with Schedule 2.3 (*Standards*)).  |
| Compatibility |  | The Supplier shall ensure that the Supplier Solution modules provide services that are described in such a way so they can be used by an (expert) third party, such as an Other Supplier. |
| Compatibility |  | The Supplier shall ensure that the Supplier Solution is compliant with Government Digital Service technology and digital standards (in accordance with Schedule 2.3 (*Standards*)). |
| Compatibility |  | The Supplier shall ensure that the Supplier Solution shall be designed and built-in order to work with mobile devices. |
| Compatibility |  | The Supplier shall ensure that the Supplier Solution provides the capability to enable interoperability of components. |
| Compatibility |  | The Supplier shall ensure that the Supplier Solution provides the capability to provide an API for the bulk Download and upload of Authority Data. |
| Maintainability |  | The Supplier shall ensure that the Supplier Solution provides the capability to enable maintainability of components without a disproportionate impact on other components. |
| Maintainability |  | The Supplier shall ensure that the Supplier Solution provides the capability to enable enhancement of components without disproportionate effort. |
| Maintainability |  | The Supplier shall ensure that the Supplier Solution provides the capability to enable re-usability of components. |
| Maintainability |  | The Supplier shall ensure the Supplier Solution provides the capability to expand the DSP so that the Authority can meet future requirements or obligations to share Authority Data. |
| Maintainability |  | The Supplier shall ensure that the Supplier Solution is scalable so that the Authority can meet future requirements to share Authority Data. |
| Portability |  | The Supplier shall design the Cloud Service Deployment Models used in the Supplier Solution to deliver a modern IT platform and more efficient Services. |
| Portability |  | The Supplier shall design the Cloud Service Models used in the Supplier Solution to deliver a modern IT platform and more efficient Services. |
| Portability |  | The Supplier shall ensure that the Supplier Solution consists of discrete pieces of software (modules) that provide application functionality through well-defined services to other modules and applications. |
| Portability |  | The Supplier shall ensure that the Supplier Solution modules provide services that impose low consumer coupling and that themselves are decoupled from its surrounding environment. |
| Portability |  | The Supplier shall ensure that the Supplier Solution is supplied as a cloud-based software service. |
| Portability |  | The Supplier shall ensure that the Supplier Solution provides the capability to enable portability to alternative architectures or platforms. |
| Portability |  | The Supplier shall ensure that the Supplier Solution provides the capability to export Authority Data in bulk when required for Disclosure Purposes, including any Metadata associated with the information which provides context and the ability to understand how the information is structured once it is outside of the Supplier Solution. |
| Portability |  | NOT USED |
| Reliability |  | The Supplier shall ensure that the Supplier Solution’s Disaster recovery site 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. |
| Reliability |  | The Supplier shall ensure that the Supplier Solution automates monitoring of the Supplier Solution to optimise the delivery of the Services. |
| Reliability |  | The Supplier shall ensure that the Supplier Solution provides a Disaster recovery site in accordance with Good Industry Practice and the requirements of Schedule 8.6 (*Service Continuity Plan*) to allow full recovery of the Services should the primary site fail, in order to meet the Performance Indicators. |
| Reliability |  | The Supplier shall ensure that the Supplier Solution stores Authority Data and information in persistent storage that allows for efficient retrieval to support data analysis. |
| Reliability |  | The Supplier shall take regular backups (in accordance with Clause 21 (*Authority Data and Security Requirements*)) that ensure in the event of a Disaster, that no Authority Data is more than twenty-four (24) hours out of date. |
| Reliability |  | NOT USED |
| Reliability |  | NOT USED |
| Reliability |  | The Supplier shall ensure that the Supplier Solution will be capable of ‘rolling back’ to a known working state should the introduction of an Upgrade, Update or New Release be found to be causing Service Incidents and Problems in the Live Environment. |
| Reliability |  | The Supplier shall ensure that the Supplier Solution will be resilient to multiple and cascading subsystem failures. |
| Reliability |  | The Supplier shall ensure that the Supplier Solution will broadcast a status upon shut down and/or re-start to all relevant End Users. |
| Reliability |  | The Supplier shall ensure that the Supplier Solution enables the capture of usage information to support benefits realisation and Usage Reporting. |
| Reliability |  | The Supplier shall ensure that the Supplier Solution has a function that logs all commands generated by the software applications/modules and the End Users. |
| Reliability |  | NOT USED |
| Reliability |  | The Supplier shall ensure that the Supplier Solution has a back-up regime that complies with the requirements of Clause 21 (*Authority Data and Security Requirements*).  |
| Standards |  | The Supplier shall design the Supplier Solution in accordance with the standards and policies listed in Schedule 2.3 (*Standards*). |
| Usability |  | The Supplier shall ensure that the Supplier Solution provides the capability to provide access to all Services and Environments through an appropriate End User Interface. |
| Usability |  | The Supplier shall design the Supplier Solution to meet the identified needs of the End Users. |
| Usability |  | The Supplier shall ensure that the Supplier Solution uses colour in presentation of information to support the End User in the processes of completing the required operational task. |
| Usability |  | The Supplier shall ensure that the Supplier Solution’s screen lay-out supports the End User in the processes of completing the required operational task. |
| Usability |  | The Supplier shall ensure that the End User Interface for the Supplier Solution is consistent as to the design of controls, warnings, indicators and layout of presentation elements. |
| Usability |  | The Supplier shall ensure that the End User Interface for the Supplier Solution draws the natural focus of the End User to the place where attention is required to complete the required operational task. |
| Usability |  | The Supplier shall ensure the Supplier Solution is accessible to End 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. |
| Usability |  | The Supplier shall provide an End User Interface for the Supplier Solution to meet (or exceed) Level AA of the [Web Content Accessibility Guidelines (WCAG) 2.1 (W3C Recommendation June 2018)](https://www.w3.org/TR/WCAG21/) (in accordance with Schedule 2.3 (*Standards*)). |
| Usability |  | The Supplier shall provide an End User Interface for the Supplier Solution to support the avoidance of erroneous input e.g. using data validation, on screen tips and context dependent Help being available. |
| Usability |  | The Supplier shall provide an End User Interface for the Supplier Solution to support experienced End Users by providing quick entry input means. |
| Usability |  | The Supplier shall provide an End User Interface for the Supplier Solution to support the overall objectives for efficiency by providing an efficient experience for End Users to minimise the delays in performing tasks. This shall include as a minimum:a)    consideration of the number of clicks to carry out processes;b)    presentation of information as to be readily identifiable as to its relevance;c)    grouping of related functions to simplify processes;d)    pre-filling of screens as End Users progress through standard workflows;e)    use of auto-complete;f)     consistency. |
| Usability |  | The Supplier shall ensure that the Supplier Solution is configured to publish date and time information using the most appropriate units of time for the circumstances, consideration having been given to End User needs. |
| Usability |  | The Supplier shall ensure that the Supplier Solution enables effective use of role-based access control and measures (such as those set out in Schedule 2.4 (*Security Management*) Annex 1 paragraph 5 (*Identity, Authentication and Access Controls*)) such as Single Sign-on to remove any need for End Users to re-authenticate needlessly. |
| Usability |  | The Supplier shall ensure that the Supplier Solution enables persistence of End User-settings between sessions. e.g. when logging in to the system it displays the same location and layer state as when the End User logged out. |
| Usability |  | The Supplier shall ensure that the Supplier Solution will ensure no End User-side software installation is required. |
| Usability |  | The Supplier shall ensure that the Supplier Solution is capable of integration with the Authority’s identity management service for Single Sign-on purposes (currently based on Active Directory). For the avoidance of doubt, the integration with the Authority’s identity management service shall be added to the Product Backlog and agreed in accordance with the Change Control Procedure. |
| Usability |  | The Supplier shall ensure that the Supplier Solution provides an ergonomic End User Interface. |
| Usability |  | The Supplier shall ensure that the Supplier Solution provides latency that is acceptable to End Users |
| Usability |  | The Supplier shall ensure that any APIs within the Supplier Solution, related to reporting, such as Help Desk, Performance Indicators etc. include a human-readable interface or output. |
| Standards |  | The Supplier shall ensure that each component of the DSP will operate correctly on the GDS list of [supported browsers and devices](https://www.gov.uk/service-manual/user-centred-design/browsers-and-devices). |
| Standards |  | The Supplier shall adhere to the [GOV.UK Open Standards principles](https://www.gov.uk/government/publications/open-standards-principles/open-standards-principles). |
| Standards |  | The Supplier shall adhere to the compulsory open standards profiles that have been [adopted for use in government](http://standards.data.gov.uk/challenges/adopted). |
| Standards |  | The Supplier shall ensure that the Supplier Solution shall be able to read, create and revise documents according to GOV.UK guidance on ['Sharing or collaborating with government documents](https://www.gov.uk/government/publications/open-standards-for-government/sharing-or-collaborating-with-government-documents)' and the [Open Document Format 1.3 standard](https://www.oasis-open.org/2021/06/16/opendocument-v1-3-oasis-standard-published/) . |
| Standards |  | The Supplier shall ensure that the Supplier Solution provides service outputs provided through GOV.UK web pages to conform to [GDS design patterns](https://www.gov.uk/service-manual/user-centred-design/resources/patterns), [service look and feel](https://www.gov.uk/service-manual/design), [page elements](https://design-system.service.gov.uk/), [standard header and footer element](https://www.gov.uk/service-manual/user-centred-design/resources/header-footer.html) and [accessibility](https://www.gov.uk/service-manual/user-centred-design/accessibility) (unless otherwise agreed by the Authority in writing). |
| Standards |  | NOT USED |
| Standards |  | The Supplier shall ensure that the Supplier Solution provides the capability to publish performance data to data.gov.uk in accordance with the [New guidance for publishing data](https://dataingovernment.blog.gov.uk/2021/02/18/new-guidance-for-publishing-data/). |
| Standards |  | The Supplier shall use data standards that are consistent with other Authority services where national/international standards cannot be used so that Authority Data can be used in Authority corporate reporting without having to edit or transform it. |
| Performance efficiency |  | The Supplier shall design the Supplier Solution to minimise the total ongoing running cost of the Supplier Solution, including operating and maintenance costs. |
| Performance efficiency |  | The Supplier shall ensure that the Supplier Solution can manage initial traffic of 500 concurrent End Users (across all aspects of the Services) carrying out mixed tasks such that the End User experience is acceptable for normal web application usage. Typical tasks performed via the Supplier Solution will be:a)    viewing the map End User Interface;b)    searching for Authority Data;c)    viewing report records; andd)    Downloading Datasets. |
| Performance efficiency |  | The Supplier shall ensure the Supplier Solution is resilient in the event of predictable peaks in demand. |
| Performance efficiency |  | The Supplier shall ensure that the Supplier Solution is resilient to the volume of stored Authority Data without degradation of the Services during peaks in demand. |
| Performance efficiency |  | The Supplier shall ensure that the Supplier Solution shall be scalable, not requiring disproportionate effort to meet changing Authority requirements. |
| Performance efficiency |  | The Supplier shall ensure that the Supplier Solution can accommodate the initial storage capacity as set out below:* Contract Year 1 = 30TB
* Contract Year 2 = 32TB
* Contract Year 3 = 34TB
* Contract Year 4 = 36TB
* Contract Year 5 = 38TB

This shall be expandable to meet future needs. For the avoidance of doubt, if additional storage capacity is required then this shall be agreed in accordance with the Change Control Procedure and be charged in accordance with the principles set out in Schedule 7.1 (*Charges and Invoicing*). |
| Performance efficiency |  | The Supplier shall ensure that the Supplier Solution shall index data for fast searching. |
| Performance efficiency |  | The Supplier shall ensure that the Supplier Solution provides adequate bandwidth to enable satisfactory End User experience. |
| Performance efficiency |  | The Supplier shall ensure that the Supplier Solution provides adequate storage. |
| Performance efficiency |  | The Supplier shall ensure that the Supplier Solution utilises defined data models for storage and retrieval of data. |
| Performance efficiency |  | The Supplier shall ensure that the Supplier Solution is scalable to support additional concurrent End Users as required by the Authority over the Term. |
| Data retention |  | The Supplier shall archive Datasets so that Authority Data can be retired if required. |
| Data retention |  | The Supplier shall ensure that archived Datasets are retained according to the defined retention period (which is configurable and is set on a per Dataset basis in agreement with the Authority Data Owner). |
| Data retention |  | The Supplier shall ensure that the Supplier Solution ensures archived Datasets that have exceeded their retention period to be permanently disposed of (the method of disposal to be agreed on a per Dataset basis with the Authority’s Data Owner). |
| Data retention |  | The Supplier shall ensure that the Supplier Solution has the capability to update and override the default retention period for all Datasets, a group of Datasets or a single specified Dataset. |
| Audit |  | The Supplier shall ensure that the Supplier Solution flags which Authority Data needs to be auditable. |
| Audit |  | The Supplier shall ensure that the Supplier Solution provides a service to record information (such as End User, date amended, changes made, etc.) against flagged Authority Data so that a full audit trail can be maintained. |
| Audit |  | The Supplier shall ensure that the Supplier Solution provides audit logs that are read only. |
| Security |  | The Supplier shall ensure that the Supplier Solution complies with the security requirements set out in Schedule 2.4 (*Security Management*). |

# **Annex B – General**

| **ID** | **Requirement** | **Latest Milestone** |
| --- | --- | --- |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to modify, revise and update the Services so that the DSP is able to be changed in a flexible and cost-effective manner in response to changing circumstances, drivers (e.g. legislation changes) or service demand. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides URLs that are persistent so that the Service meets Government guidance on URL persistence and is seen as a trusted source of Authority Data that End Users can be confident will continue to make data available. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution ensures URLs are unique and predictable so that the Authority can ensure that identification of data is simple and works across multiple systems (Metadata, data publishing, etc.). | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides URLs that are supplier agnostic and portable so that End Users ‘ access to Authority Data is not impacted by any future change of Supplier. | ATP1 |
|  | The Supplier shall ensure URLs in existing DSP services and API Endpoints used in the Legacy DSP must be maintained, repointed and transferred in the next iteration of the Data Services Platform. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to Test, implement, operate and manage new services. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to be able to build Apps with near real time Authority Data so that End Users can access the most up-to-date source Authority Data. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides capabilities for the Authority to publish [W3C Star Open Data](https://www.w3.org/2011/gld/wiki/5_Star_Linked_Data). | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution shall not rely on manual process where possible. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to make creation and updating of records to be as simple as possible so that the DSP can be used by End Users with varying skillsets.[[1]](#footnote-2) | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution is flexible so that when Datasets are changed or updated, or new Datasets are introduced, the DSP will continue to work correctly. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to specify that the DSP only actively presents the latest version of a Dataset (marking earlier versions as withdrawn or obsolete) or retains earlier versions and continues to make those available to End Users of the Service. | ATP1 |

**Annex C – End User Interface**

| **ID** | **Requirement** | **Latest Milestone** |
| --- | --- | --- |
|  | The Supplier shall ensure that the Supplier Solution’s End User Interface shall be easy to configure and maintain by Service Administrators so that content can be incorporated and managed elsewhere in the platform (E.g. search/dashboards/posts etc.) | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides consistent Authority branding across all components of the DSP (in accordance with Clause 25 (*Publicity and Branding*)) so that End Users are aware that it is a Defra Group service. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides text content and image/elements of the platform to be configurable and maintained by Service Managers so that the DSP can be amended without Supplier input. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution Apps will be made available as a searchable catalogue (that can be configured by Service Administrators), ensuring Apps are easily accessible and presented to End Users in a manner that allows quick assessment of what is available and which App is relevant to their needs. | ATP2 |
|  | The Supplier shall ensure that all elements in the Supplier Solution shall be integrated so that End Users have a uniform experience across the DSP. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution follows the pattern designs at <https://pautva.github.io/dd3-wireframes/#/main-content/introduction> and Introductory blog post at: https://geospatialcommission.blog.gov.uk/2021/09/10/the-secret-to-great-geospatial-data-portals-start-with-the-user/ so that best practice can be used (unless otherwise agreed by the Authority in writing). | ATP1 |
|  | The Supplier shall ensure all guidance, internal and external, is accessible and embedded within the Supplier Solution rather than as a separate resource. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides a dynamic End User Interface re-using elements, such as the Knowledgebase, to keep End Users informed of developments and updates. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to create and update Authority Data records, guidance and standards by automation, use of templates or controlled lists. | ATP1 |

**Annex D – Discovery and Search**

| **ID** | **Requirement** | **Latest Milestone** |
| --- | --- | --- |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to search for Authority Data based on a map, using a pre-defined/End User defined area or Spatial or location criteria. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to offer suggestions based on associated searches (e.g. 'if you are interested in this then you might also be interested in that') so that End Users are informed of Authority Data that is related to their searches. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to search by category, such as topic or theme (e.g. Flood) or other criteria, including location, so that all Datasets relevant to the search term are returned. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to search for multiple Datasets and allow an End User to acquire multiple Datasets through a single transaction. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to filter by service type (WCS, WFS, Download etc.) with signposting where Authority Data is, if published on a different platform, other than the DSP alongside the web resource link in the Metadata. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability for public facing Metadata to be available to generalist search engines so that Metadata Catalogue results are returned from an internet search (e.g. Chrome, Google). | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to publish Metadata Records with a Google Dataset Search tag so that Metadata Catalogue results are shown in a Google Dataset Search. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to provide a search interface for Authority Data across the Defra Group so that it is accessible to human and machine searches. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to limit search capability to End User access permissions so that End Users can only search for Authority Data they have access to. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the ability to search/filter specifically on the format of Datasets or service type, including Spatial services, APIs, Apps etc. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to apply a filter prior to search and sorting by publisher/organisation, ascending date modified/revision, last time data was modified on the DSP, by organisation. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the functionality to allow End Users to enter a single search for information and Authority Data across the entire DSP. | ATP2  |
|  | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to search/query Metadata Catalogue content through interfaces not available on the DSP e.g. Intranet or SharePoint, that is linked to End User access permissions. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to query the data that the Metadata Record relates to. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to filter search results by a set of End User defined criteria, such as date of last update, location, organisation etc.. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to search for third party Datasets that are available through the Supplier Solution, alongside the relevant T&Cs, with the correct permissions set to be able to access them when appropriate. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution will provide Data Services available on the DSP as a searchable catalogue, that can be configured by Service Administrators, ensuring content is easily accessible and presented to End Users in a manner that allows quick assessment of what is available and which App/API is relevant to their needs. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to search through all Metadata by any attribute or combination of attributes (including dates and date ranges) so that End Users can search for the type of Authority Data they need to access. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to filter the values of attributes when selecting Metadata search parameters and autocomplete for existing values so that End Users can select attribute values that exist and do so efficiently. |  |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to be able to control the number of records that are displayed on each page of search results so that when Metadata is searched, End Users are able to navigate more easily through the results. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to be able to control the order in which search results are displayed (e.g. recency, relevance etc.) so that the results are displayed in the preferred order for each search. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to filter the search results that are being displayed by selecting/deselecting various attribute values in the results display so that the search results are reduced to those that are of interest to End Users. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to return a search result (JSON) entered in the DSP site from the Metadata Catalogue via an API so that search results are consistent between DSP components. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability for rephrasing, autofill, and suggestions in End User searches. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to select and display which Metadata attributes are returned to End Users from search results. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to ascertain which Authority Data quickly and easily have been recently updated (last week/last month/since last visit) so that End Users can identify Authority Data requiring update. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for Services and Apps, consuming DSP Datasets, but not directly hosted on the DSP, to be discoverable and accessed via the DSP. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to search API and Widget documentation that is integrated with associated Metadata. | ATP2 |

**Annex E – Guidance and Feedback**

| **ID** | **Requirement** | **Latest Milestone** |
| --- | --- | --- |
|  | The Supplier shall ensure the Supplier Solution provides accessible guidance and support through a Knowledgebase for the Supplier Solution. The Knowledgebase shall allow for configurable views of the End User Interface to meet the needs of different End Users. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to configure Help text and/or links to further Help information for attributes so that Technical Leads can access this Help when they are creating or editing Metadata Records and know who to contact if they need further assistance. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to submit questions or feedback on any of the Services or Authority Data held on the DSP, and monitor the progress of the response to the question or feedback. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to respond to specific End Users questions, automatically, based on previous Knowledgebase responses. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to notify Service Administrators about issues, feedback and ask questions about the Service, and update and respond to End Users. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to receive feedback and enable End Users to ask questions, that have been posted via Social Media platforms, such as Twitter. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to automatically capture the context of associated End User feedback, such as functionality or Authority Data being accessed, so that support tickets can be pre-populated for ease of response by the Supplier or Service Manager as required. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to respond to questions on the DSP, relevant to the service the End User is accessing. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to ask a question or raise a fault. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to automatically provide Help or respond to End User questions through the End Users context on the DSP. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides a notification on the End User Interface of any outage. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to interact with End Users via Social Media.  | ATP2 |

**Annex F – Publishing**

| **ID** | **Requirement** | **Latest Milestone** |
| --- | --- | --- |
|  | The Supplier shall ensure that the Supplier Solution provides the capability for Authority Data publication to be automated as far as possible so that the DSP can be used to respond to an immediate need to publish Authority Data. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to host and publish large Datasets (e.g. [Digital Terrain Model](https://environment.data.gov.uk/dataset/6f59c1ce-cc11-43aa-b11d-e1c3ab43a192)) without having to decompose them into smaller Datasets so that End Users do not have to join the smaller Datasets to get the whole Dataset. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has a formal change control process for Authority Data publication both when new Datasets are brought into the DSP and when existing Datasets are amended so that changes are appropriately managed and risks mitigated. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to bulk upload new or updated Datasets into the DSP for self-publication, with no additional cost and little or no Supplier support or the need for bespoke software. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to publish Authority Data without End Users having to email or send physical media so that efficiencies can be achieved by using a standard data transfer mechanism for all Datasets. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to upload Authority Data without completing Metadata fields that are not relevant to an End User’s data or can be auto populated. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides an instance where a Dataset is published through multiple DSP services (e.g. Spatial Data Services and Linked Data) the update process is seamless and has no delay, or minimal delay. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to share Authority Data via a simple public facing End User Interface, to timescales defined in Schedule 2.2 (*Performance Levels*) so that Authority Data can be published quickly and efficiently. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution’s validation errors are written in plain English so that errors can be easily understood to facilitate record correction. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to schedule publication for a specific day and time so that publication can be scheduled to co-ordinate with a specific event (e.g. an announcement) without having to wait for that day and time. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution is able to identify which specific Metadata Records do not validate when harvested (not just the number of non-validating records) so that records can easily be corrected. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to specify and supply styling/display specifications/symbolisation to End Users alongside Authority Data and to incorporate standardised styling/symbolisation into DSP services, such as WMS, so that Authority Data supplied via DSP is directly usable by End Users. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to publish authorised Authority Data quickly during a major incident (such as flooding or a disease outbreak), if necessary, bypassing certain processes such as data quality validation or change management sign-off. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for some attributes of a Metadata Profile to be pre-populated so that End Users can choose to use these pre-populated values instead of having to type them in. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution is able to assign supporting information, or links to supporting information, such as Licences, guidance documents and Metadata Records so that Authority Data supplied via the DSP contains all relevant supporting information. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for a Defra Group body to allow another Defra Group body to enable a publishing capability, so that the organisations can choose to operate in a semi-autonomous manner where it is more efficient to do so. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to edit and update the generic contact details used by the DSP when transforming records for external publication and have the changes applied to all newly harvested records, so that contact details can be kept current. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to notify when new Authority Data has been successfully uploaded, received and published so that suitable assurance is in place. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides a service to support the publication of both structured and non-structured Authority Data. | ATP1 |
|  | The Suppliers shall ensure that the Supplier Solution has the capability to suppress the publication of specific attributes contained in a Metadata Profile supported by the Metadata Catalogue so that these attributes are not visible outside of Defra Group. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the necessary interfaces and import mechanisms to enable the provision of new, updated and changed (e.g. data schema) data products. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides a service to check new, updated or changed Authority Data for errors upon receipt and if errors are detected either advise the Servicer Administrator that they constitute acceptable errors or reject the data product entirely so that the quality of Authority Data and the resilience of the DSP can be assured. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to notify End Users when new Authority Data for an organisation has been successfully uploaded, received and published so that suitable assurance is in place. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution ensures Metadata, that is captured internally, adheres to the relevant standards to which Defra Group needs to publish externally so that Metadata is compliant and usable by others. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has capability to harvest or bulk import Metadata mastered in different Metadata catalogues into the Metadata Catalogue (where Metadata standards align with the Metadata Profile specification) so that existing sources of Metadata can be consolidated into an authoritative system.[[2]](#footnote-3) | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to automatically harvest Metadata from other internal Defra Group systems, so that Metadata can be easily acquired and support enhanced discovery of Datasets. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability for updating data links in Metadata to be simple (e.g. automated between Metadata and Data Services; properties of a Dataset link to be populated automatically) without the need for laborious manual entry. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to add new Metadata standards and associated templates so that relevant Metadata can be created depending on the Authority Data published.[[3]](#footnote-4) | ATP2  |
|  | The Supplier shall ensure that the Supplier Solution provides the capability for the maintenance of Metadata Records across the Environments to be simple and automated where possible, without the need for laborious manual entry. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution utilises managed vocabularies from external and internal sources and allocate values from these vocabularies to records as keywords or categories so that vocabularies managed externally to the Metadata Catalogue can be incorporated.[[4]](#footnote-5) | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides automated harvesting or publishing of Metadata through a customisable schedule so that Metadata is harvested/published at appropriate times. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to publish Non-Spatial Metadata from the Metadata Catalogue so that Metadata for Non-Spatial data can be easily published to [DATA.GOV.UK](https://data.gov.uk) without unnecessarily transforming to a Spatial format. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution publishes Catalogue Services for the Web (CSW). | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution ensures that internal validation of records aligns with the validation applied to records by [DATA.GOV.UK](https://data.gov.uk) when harvesting so that records can be harvested with minimal constraint and delay. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution shall replace personal staff details with generic role based contact details prior to its publication on public facing Metadata catalogues (such as [DATA.GOV.UK](https://data.gov.uk)) so that people outside of the Defra Group can use the official contact channels and do not access information that would enable them to contact staff directly. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to publish Non-Spatial Datasets without needing to complete Spatial Dataset elements, conforming to best practice so that a wider range of Datasets can be made available to consumers. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution integrates the Metadata Catalogue with the publication of Linked Data (API) so that a Metadata Record is automatically updated when Linked Data is published. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution ensures that the most recently approved/published version of a Metadata Record remains live on the Metadata Catalogue/DSP whilst new edits are completed. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution ensures a publication facility for Metadata that adheres to the ['Guidance for users, publishers and sysadmins](https://github.com/datagovuk/guidance)' (in accordance with Schedule 2.3 (*Standards*)) provided by [DATA.GOV.UK](https://data.gov.uk) so that Metadata is published to [DATA.GOV.UK](https://data.gov.uk) in a standardised and consistent manner. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution enables publishing of Metadata Records to the DSP, [DATA.GOV.UK](https://data.gov.uk) and other external commitments such as [MEDIN](https://medin.org.uk) (in accordance with Schedule 2.3 (*Standards*)).  | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution is able to publish new and manage existing Authority Data and Data Services on behalf of any Defra Group organisation and expose licensing conditions in Metadata. | ATP1 |

**Annex G – Access Management**

| **ID** | **Requirement** | **Latest Milestone** |
| --- | --- | --- |
|  | The Supplier shall ensure that the Supplier Solution provides a solution that has role-based access controls, where an End User can register to gain access for additional permissions and access to Authority Data and/or Metadata where it needs to be restricted. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution manages End User accounts for Internal Users (Active Directory) and External Users (identity or [GOV.UK Accounts](https://www.gov.uk/government/publications/introducing-govuk-verify/introducing-govuk-verify?msclkid=ecf8421aab5611ecbd96a4eb544a600b)) so that End Users have Single Sign-on functionality and do not need to register for a separate identity management service or follow a separate User Registration process. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution is able to define who can supply new Authority Data into the DSP so that supply is restricted to a set of people who are then empowered to make changes. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution allows Local Administrators for each Defra Group body to be able to run and maintain all elements of the DSP specifically corresponding to their organisation, on behalf of that organisation (e.g. End User management, Metadata and data publishing, etc.) so that Defra Group bodies can manage and maintain their own data supply with no or minimal Supplier involvement. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability for each Defra Group body to be able to pass the publishing capability to another so that the organisation can choose to operate in a semi-autonomous manner where it is more efficient to do so. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for End Users to accept all applicable T&Cs prior to submitting an order for Authority Data so that End Users are able to view and explicitly accept all applicable T&Cs before submitting a request for Authority Data. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the functionality to be able to define the access rights for a specific Dataset and End User/End User type so that the DSP can support a variety of Licences to be made available to End Users depending on the Dataset. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution supports sharing Open Data with all End Users without the need to register and log in to the DSP so that End Users can work collaboratively and share authorised Authority Data in a standardised manner, following rules agreed in the relevant Licence. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to define who can modify existing Authority Data in the DSP, e.g. update Authority Data so that supply is restricted to a set of people who are then empowered to make changes. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to amend User Registration details (such as contact information, password, etc.) so that End Users can maintain an account without the need for support. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to enable/disable Defra Body Contractor access (based on parameters such as a date range) so that they cannot access Authority Data when out of contract. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to distinguish between Authority Data available for public use, public use under specific conditions, public use on request under specific conditions, partner use (by Organisation), internal only use and manage access accordingly. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides a system that can allocate, restrict and report ownership of Authority Data and/or Metadata to a named individual/role. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to allocate of owning organisation, Business Areas and sub-Business Areas (see Environment Agency Metadata Profile specification (in accordance with Schedule 2.3 (*Standards*)) from a managed list of those entities so that a single, centrally managed list can be maintained without the need for the Metadata Catalogue to hard code/manage/update a separate version. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to restrict access to reports/dashboard according to organisation, User Role etc. so that reports can be accessed by those with the relevant permissions. | ATP1 |
|  | The Supplier Solution shall be able to define who can edit/submit or publish the Metadata that End Users have created so that editing is restricted to a set of people who are then empowered to make changes. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to transfer ownership of a Metadata Record (e.g. when a Technical Lead leaves or change’s role) so that the Data Owner contact data is kept up to date. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to create and edit profiles for different types of Dataset so that these attributes are defined by default and ensure that Datasets of that type are described consistently. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to control and restrict access to Metadata for certain User Roles or specific Defra Groups (subject to appropriate access restrictions) and control which are exposed externally or only available to the Defra Group. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution ensures there is capability to allow read-only access to all Metadata Records for staff across Defra Group based on their existing digital identity. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to manage the distribution of Authority Data under a Licence specified by the Authority. | ATP1 |

**Annex H – Not Used**

**Annex I – Not Used**

**Annex J – Usage Reporting**

| **ID** | **Requirement** | **Latest Milestone** |
| --- | --- | --- |
|  | NOT USED |  |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to monitor the volume of Authority Data held in the DSP and identify significant trends and variations so that Authority Data volumes can be managed. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides a reporting capability that can be made available to other End Users on a role/permission basis so that they can create and configure their own reports on the Authority Data they publish and be able to share their reports with others. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to create reports based on information available within the DSP (e.g. usage data, availability, audit data etc. as agreed with the Authority). | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to create reports based on other data that is available in the DSP (e.g. End User/usage data, audit data etc.) so that Service Administrators can monitor compliance with Performance Indicators and the overall quality of the service. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution is able to report on Authority Data and Metadata that have not been updated for a specified time or have not been updated according to the Dataset’s update frequency. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to access validation reports, including reports of errors that are acceptable and errors that result in rejection after validation, browse the reports and export them in a readily accessible format so that Service Administrators can manage and support improvements in data quality. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for a simple export function that provides a comprehensive extract and Download of all Metadata stored within the DSP so that internal reporting requirements can be met. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for Service Administrators to build and access dashboards. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides a reporting solution that is configurable by Service Administrators so that usage reports can be built for specific purposes. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to filter out Bot hits (e.g. Google crawler) from DSP usage reports. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to sort and filter all reports on relevant fields, including filtering by date range so that reporting data is more easily accessible. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to ensure all reports that include Personal Data are anonymised so that GDPR legislation is not breached. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to Download all reports in csv format. Downloaded reports should reflect the filters that are applied so the reporting data that is required is more accessible. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to configure and provide reports by User Roles e.g. Data Owners (i.e. a Business Area or sub-Business Area), records owned by a specific owner so that specific reports can be configured for defined End User groups. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to track which Authority Data is available by category so that data available by User Role can be reported. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to enable Service Administrators to configure and provide dashboards/reports by User Roles. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to provide integrated Authority Data and Metadata usage reports integrated with all DSP components so that the number of Downloads, access, calls can be broken down by various DSP components. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for full reporting integration for all components that constitute the DSP. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to run bespoke reports from the Metadata Catalogue on End Users, usage and content so that Service Administrators can manage, monitor, and provide statistics on the Metadata Catalogue. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to monitor network performance into and out of the DSP for both real time and trend analysis. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to record End User’s clicks on the DSP. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to record the time End Users spend accessing the DSP. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to track usage at the Dataset level so that usage for each Dataset published on the DSP can be reported. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to record which search terms End Users have used. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution records which web page an End User navigates to from search results so that End User behaviour can be analysed. | ATP2 |
|  |  NOT USED. |  |

**Annex K – Not Used**

**Annex L – Linked Data**

| **ID** | **Requirement** | **Latest Milestone** |
| --- | --- | --- |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to publish and update Authority Data as Linked Data so that Professional Users can create applications that make innovative use of Authority Data. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to publish and update Linked Data through automated feeds from agreed data sources so that Professional Users can create applications that make innovative use of Authority Data. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to provide a Linked Data feed (API) so that Authority Data can be used directly in third party applications. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides a service to enable active query of Authority Data using a suitable query language such as [SPARQL](https://www.w3.org/TR/sparql11-overview/) (<https://www.w3.org/TR/rdf-sparql-query/>) so that End Users can interrogate Authority Data. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides a service to publish our vocabularies (ontologies) defining available terms (and how those terms relate) using appropriate standards such as [RDFS](https://www.w3.org/TR/rdf-schema/), OWL ([Web Ontology Language](https://www.w3.org/OWL/)) and SKOS ([Simple Knowledge Organization System](https://www.w3.org/TR/skos-reference/)) so that Authority Data is published in context. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution is able to integrate Linked Data with Spatial Data so that a variety of End Users can access Authority Data published as Linked Data. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to embed Defra Group bodies’ data quickly and easily into a web service so that present, up to date information is available to members of the public. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides a service to use http URIs so that so our End Users can use standard web client software to look up and access Authority Data that is published. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to integrate and host existing Linked Data based Apps within the overall service hosting and management so that disparate services are hosted, operated and supported as part of single integrated and managed Linked Data service. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to monitor and report on the status of automated Linked Data updates. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to publish standards compliant Apps. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to make near real-time Authority Data collected from telemetry stations available to consumers as a Linked Data service.[[5]](#footnote-6)  | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution ensures there is capability for detailed, standardised online documentation to enable use of the APIs and Widgets so that services can be published that utilise or provide access to Defra Group Authority Data. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution uses URIs to name (identify) things (entities, classes, concepts or properties) so that Authority Data is universally accessible in machine readable format to maximise its usability. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to use HTTPS URIs where specified, such as for administrative access and authentication, so that authentication and security is ensured. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to provide useful information, represented using RDF ([Resource Description Framework](https://www.w3.org/RDF/)) (in accordance with Schedule 2.3 (*Standards*)), when someone looks up a URI, so that Authority Data is modelled to appropriate and extensible standards that support consistent and ease of access/use. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to include links to other URIs so that our End Users can discover more and integrate Authority Data more seamlessly with each others’ data. | ATP1 |

**Annex M – Data Services**

| **ID** | **Requirement** | **Latest Milestone** |
| --- | --- | --- |
| FR\_DS\_1 | The Supplier shall ensure that the Supplier Solution has the capability for Spatial Authority Data to be provided as OGC API – Features ([OGC API - Features](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fogcapi.ogc.org%2Ffeatures%2F%3Futm_source%3Dphplist829%26utm_medium%3Demail%26utm_content%3DHTML%26utm_campaign%3DCompliance%2Btesting%2Bnow%2Bavailable%2Bfor%2B%25E2%2580%2598OGC%2BAPI%2B-%2BFeatures%2B-%2BPart%2B2%25E2%2580%2599%2Bstandard&data=04%7C01%7Cjon.mitchell%40environment-agency.gov.uk%7C0d7d03a4785449d5c87b08d9bedfe535%7C770a245002274c6290c74e38537f1102%7C0%7C0%7C637750691093316867%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=%2Bq486zVyTUTkiGq%2BK4TtMh5yr29gi2k%2F%2FQkAx%2FybKvs%3D&reserved=0), [GitHub - opengeospatial/OGC-Web-API-Guidelines](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgithub.com%2Fopengeospatial%2FOGC-Web-API-Guidelines&data=04%7C01%7Cjon.mitchell%40environment-agency.gov.uk%7C0d7d03a4785449d5c87b08d9bedfe535%7C770a245002274c6290c74e38537f1102%7C0%7C0%7C637750691093326827%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=QbXLHPxx58jgqVTf%2BJZ44oC2AkeZTxIcDRNpOzfiDIg%3D&reserved=0)) Services (in accordance with Schedule 2.3 (*Standards*)). | ATP1 |
| FR\_DS\_2 | The Supplier shall ensure that the Supplier Solution provides the capability for an OGC Compliant View (WMS, WMTS, WCS) ([Web Map Service | OGC](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ogc.org%2Fstandards%2Fwms&data=04%7C01%7Cjon.mitchell%40environment-agency.gov.uk%7Ced1c4122d2b14eead4a208d9b59c8694%7C770a245002274c6290c74e38537f1102%7C0%7C0%7C637740506132984755%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=uLF%2BdVgWwVNOCehE3IwqahwnCVtW0OqNCFbstD7%2FRow%3D&reserved=0), [OpenGIS Web Map Tile Service Implementation Standard | OGC](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ogc.org%2Fstandards%2Fwmts&data=04%7C01%7Cjon.mitchell%40environment-agency.gov.uk%7Ced1c4122d2b14eead4a208d9b59c8694%7C770a245002274c6290c74e38537f1102%7C0%7C0%7C637740506132984755%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=wSH7k8LiR4VBxEdT%2BiGUs1fm6i4NKeC00zg7GmMAc%2B0%3D&reserved=0), [Web Coverage Service | OGC](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ogc.org%2Fstandards%2Fwcs&data=04%7C01%7Cjon.mitchell%40environment-agency.gov.uk%7Ced1c4122d2b14eead4a208d9b59c8694%7C770a245002274c6290c74e38537f1102%7C0%7C0%7C637740506132994714%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=GKAKofPNYE9nSmhfMXBGMQPcxQ6w5Ku9CCWjMPyNb5k%3D&reserved=0)) service that meets the published technical obligations of relevant legislation (such as the INSPIRE Regulations ([Data Specifications | INSPIRE (europa.eu)](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Finspire.ec.europa.eu%2Fdata-specifications%2F2892&data=04%7C01%7Cjon.mitchell%40environment-agency.gov.uk%7Ced1c4122d2b14eead4a208d9b59c8694%7C770a245002274c6290c74e38537f1102%7C0%7C0%7C637740506133004669%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=ng1es4LNh6M4Lm%2FRH2nCryKQHL8h3vbtHCOftYhULbQ%3D&reserved=0), [http://inspire.ec.europa.eu/](https://eur03.safelinks.protection.outlook.com/?url=http%3A%2F%2Finspire.ec.europa.eu%2F&data=04%7C01%7Cjon.mitchell%40environment-agency.gov.uk%7Ced1c4122d2b14eead4a208d9b59c8694%7C770a245002274c6290c74e38537f1102%7C0%7C0%7C637740506133004669%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=QyB4SDMEi829snCRlHUwGmWkUJ2z7RsJMEKopvsr%2Bxg%3D&reserved=0)) so that Defra Group organisations are compliant with the obligations placed upon it (in accordance with Schedule 2.3 (*Standards*)). | ATP1 |
| FR\_DS\_3 | The Supplier shall ensure that the Supplier Solution has the capability for all Spatial Authority Data to be provided as WMS, WMTS, WCS and WFS to be supplied via a service that allows multiple Datasets to be selected and made available via a single URL (in accordance with Schedule 2.3 (*Standards*)). | ATP1 |
| FR\_DS\_4 | The Supplier shall ensure that the Supplier Solution provides the capability for an OGC Compliant Download WFS ([Web Feature Service | OGC](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ogc.org%2Fstandards%2Fwfs&data=04%7C01%7Cjon.mitchell%40environment-agency.gov.uk%7Ced1c4122d2b14eead4a208d9b59c8694%7C770a245002274c6290c74e38537f1102%7C0%7C0%7C637740506133014621%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=CA2uUJVK%2BGeHDRUQSilP1YRui2LpvHbfLF3%2BtHp8hHk%3D&reserved=0)) service that meets the published technical obligations of relevant legislation (such as the INSPIRE Regulations so that an organisation is compliant with the obligations placed upon it (in accordance with Schedule 2.3 (*Standards*)). | ATP1 |
| FR\_DS\_5 | The Supplier shall ensure that the Supplier Solution has the capability to support current WMS services and WFS services that have been published to OGC standard that have been superseded (WMS 1.3.0; WFS 1.0.0, 2.0.0) so that Legacy DSP services continue to be supported (in accordance with Schedule 2.3 (*Standards*)). | ATP1 |
| FR\_DS\_8 | The Supplier shall ensure that the Supplier Solution has the capability to show geographical areas that extend outside of the UK so that Datasets that are regional, continental or worldwide in nature can be described and viewed. | ATP1 |
| FR\_DS\_9 | The Supplier shall ensure that the Supplier Solution has the capability be able to order Authority Data via an API interface to specify the area of coverage and the type/year of Authority Data. | ATP1 |
| FR\_DS\_10 | The Supplier shall ensure that the Supplier Solution has the capability to select a pre-defined geographical area from a list of area types (e.g. national areas, counties, administrative areas) so that End Users can quickly and easily define the area that the Dataset covers. | ATP1 |
| FR\_DS\_11 | The Supplier shall ensure that the Supplier Solution has the capability to show the geographic area using more than one administrative area or standard shape (e.g. 2-3 adjacent or non-adjacent administrative areas, 2-3 shapes that may or may not overlap) so the area that the Dataset covers using multiple shapes can be described. | ATP1 |
| FR\_DS\_12 | The Supplier shall ensure that the Supplier Solution has the capability to order Authority Data for an End User defined area using an organisation's (default) area of interest or an uploaded area of interest so that national large, complex Datasets that would otherwise be difficult to manage can be utilised. | ATP1 |
| FR\_DS\_13 | The Supplier shall ensure that the Supplier Solution has the capability to draw a geographical area by way of a set of standard shapes (e.g. square, rectangle, circle, and polygon) so that if there are no pre-defined areas that are suitable End Users can describe the area that the Dataset covers. | ATP1 |
| FR\_DS\_14 | The Supplier shall ensure that the Supplier Solution has the capability for our most complex Datasets (Such as [Risk of Flooding from Rivers and Sea](https://environment.data.gov.uk/dataset/8d57464f-d465-11e4-8790-f0def148f590)) to be used for Spatial analysis as a WFS without issue. | ATP2 |
| FR\_DS\_16 | The Supplier shall ensure that the Supplier Solution adheres to standard coordinate systems as defined by the Authority and in-line with reporting commitments, such as those defined under the INSPIRE Regulations. | ATP1 |
| FR\_DS\_17 | The Supplier shall ensure that the Supplier Solution has the capability to make Authority Data available at different zoom extents/display scales (to be able to define a scale range relevant to all services - map display/WFS/WMS/WCS etc.) so that End Users can view and use Authority Data set at different view scales. | ATP1 |
| FR\_DS\_18 | The Supplier shall ensure that the Supplier Solution ensures there is capability to make Authority Data authorised for sharing to be linked to a specified Metadata Record on www.data.gov.uk. | ATP1 |
| FR\_DS\_19 | The Supplier shall ensure that the Supplier Solution has the capability to Download large survey Datasets, e.g. LiDAR composite, in an efficient way by ordering several grid-squares of Authority Data simultaneously, without having to select each tile individually. | ATP1 |
| FR\_DS\_20 | The Supplier shall ensure that the Supplier Solution has the capability to Download Datasets, in an efficient way, based on an area of interest (e.g. via an API interface that lets an End User specify an area of coverage and the type/year of Authority Data). | ATP1 |
| FR\_DS\_21 | The Supplier shall ensure that the Supplier Solution provides a service to check new, updated or changed Authority Data for errors (using suitable data quality standards, such as ISO 19157:2013, as agreed by the Authority and the Supplier) upon receipt and if errors are detected either advise the Service Administrator that they constitute acceptable errors or reject the data product entirely, so quality and resilience of the DSP is ensured. | ATP1 |
| FR\_DS\_22 | The Supplier shall ensure that the Supplier Solution provides the capability to receive, convert and share Authority Data in multiple different Spatial (raster and vector) and Non-Spatial Authority Data formats so that re-use of authorised Defra Group Authority Data is maximised. | ATP1 |
| FR\_DS\_23 | The Supplier shall ensure that the Supplier Solution has the capability for Authority Data to be accessible in a range of appropriate data formats as defined by the Authority so that a wide range of End Users and usage is supported. | ATP1 |
| FR\_DS\_24 | The Supplier shall ensure that the Supplier Solution ensures Authority Data is available at different zoom extents/display scales. | ATP1 |
| FR\_DS\_25 | The Supplier shall ensure that the Supplier Solution provides imagery Authority Data as analysis ready so that Authority Data doesn't need to be pre-processed. | ATP2 |
| FR\_DS\_26 | The Supplier shall ensure that the Supplier Solution ensures there is capability to acquire, through the Authorities permitted licences, and make available third-party Datasets e.g. Ordnance Survey, from source. | ATP1 |
| FR\_DS\_28 | The Supplier shall ensure that the Supplier Solution ensures there is capability to Download Authority Data in a variety of formats as defined and agreed with by the Authority. | ATP1 |
| FR\_DS\_29 | The Supplier shall ensure that the Supplier Solution ensures that the Corporate Addressing Data Standard (in accordance with Schedule 2.3 (*Standards*)) is used, where applicable, as their addressing solution. | ATP1 |
| FR\_DS\_30 | The Supplier shall ensure that the Supplier Solution provides the capability to inform End Users about the latest releases of Authority Data and Data Services, after an update or the publication of a new Dataset to the DSP. | ATP1 |

**Annex N – Metadata Catalogue**

| **ID** | **Requirement** | **Latest Milestone** |
| --- | --- | --- |
|  | The Supplier shall ensure that the Supplier Solution has the capability to create and store Metadata (for both Spatial and Non-Spatial Datasets) that conforms to the Metadata Profile, derived from the UK GEMINI standard (in accordance with Schedule 2.3 (*Standards*)) or newly defined Metadata standards so that relevant Metadata standards and data discovery legislative obligations are complied with.  | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for all Metadata XML be validated using GEMINI Schematron schema so that ISO 19139 technical specification (which sets out an [XML grammar for encoding ISO 19115 metadata](https://www.iso.org/standard/32557.html) (in accordance with Schedule 2.3 (*Standards*)) is complied with. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to enable creation of [INSPIRE compliant metadata](https://inspire.ec.europa.eu/metadata/6541) (in accordance with Schedule 2.3 (*Standards*)). | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to be flexible and implement changes or extensions to the Metadata Profile, or a new Metadata Profile such as the marine metadata standard, [MEDIN](https://medin.org.uk/medin-discovery-metadata-standard) (in accordance with Schedule 2.3 (*Standards*)) and ensure updates are automated where change would impact an existing standard. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides a service that allows the Metadata Profile to be extended to support specific elements that meet the needs of different Business Areas whilst ensuring that the base profile remains standards-compliant so that the DSP meets the wider needs of Business Areas in a consistent manner. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has an import mechanism so that Internal Users can ingest / update single or multiple Metadata Records as a bulk upload.[[6]](#footnote-7) | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to import Metadata for Datasets that are hosted elsewhere. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to define Metadata attributes that have pre-defined pick lists (e.g. administrative areas, status values, GEMET (in accordance with Schedule 2.3 (*Standards*)) terms related to environmental data etc.). | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to add, change and delete the contents of the pre-defined pick lists. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to select multiple keywords (**“Tags”**) from one or more vocabularies so that these keywords can be applied to a Dataset and used in searches and reports. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to define vocabularies of Tags that Technical Leads can choose from a list of valid keywords. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to create different types of Metadata attributes (e.g. free text fields of a fixed length, multi-line fields, date fields, drop-down lists, numeric fields, tick-box fields etc.) which are named using standards. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to integrate the Metadata Catalogue with internal controlled lists/reference Datasets to ensure standardised population of Metadata Records e.g. owning Business Area/sub-Business Area/owner etc. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to update Metadata from source data systems, to populate attributes such as Spatial extent.[[7]](#footnote-8) | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the ability to access additional resources from a Metadata Record e.g. End User documentation, feature catalogue. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution’s Metadata is available with the Authority Data at the point of use so that Metadata is available to Internal Users and External Users irrespective of the access format (e.g. WMS/WFS and other Endpoints and Downloads will have associated Metadata). | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution Metadata is available at the point of use and created where Authority Data is available so that Metadata is consistent with the Authority Data available to End Users. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution Metadata quality is controlled and improved by well-designed systems and controls so that Authority Data is consistent and of high quality and prevent against entry of duplicate Metadata. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to be able to view previous versions of a Metadata Record and who made the change. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to be able to approve changes to new/changed Metadata Records. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to create a draft version of a Metadata Record which will replace the current version when it is approved. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for all Metadata Records to be validated to ensure Metadata Profile specifications are met before they are submitted for approval. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to indicate security level information or publishing approval status for each Dataset. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to have a process for the quality control and assurance of Metadata prior to its publication. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to reject new/changed Metadata Records that require approval and indicate reason(s), so that the new/changed Metadata Records can be corrected (or discarded) by the Technical Lead who made them. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to discard changes to a Metadata Record made by Technical Leads. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to enter a review date against some Metadata Records. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to distinguish between the creation and approval of Metadata Records so that, under normal circumstances, the same person cannot approve records that they have created. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to set the status, such as draft, of a Metadata Record (or to have it automatically set, where appropriate). | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to mark a Metadata Record as 'archived'.[[8]](#footnote-9) | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to differentiate between retired Metadata and superseded Metadata Records.[[9]](#footnote-10) | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution can update the 'Revision Date' in Metadata via automated processes (as well as manually where applicable) so that the latest update date of a Dataset or service is the date of extract from a source system rather than the date the update was implemented. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution provides a service that provides a profile (i.e. template) based system for Metadata Record management so that Metadata Records are created and updated in a consistent and efficient manner. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to list all Metadata Records (sorted by title and/or other attributes) so that records can be browsed without a search criterion. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution incorporates licensing information into a Metadata Record or derive from a separate source so that appropriate, up-to-date licensing information is held for each Metadata Record. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to define Metadata for Spatial Datasets that visually shows the geographic extent of the Dataset so that End Users can see a map of the area that the Dataset covers in a consistent manner. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to browse a list of Metadata Records that Technical Leads are able to change, so that a single Metadata Record for editing or use the list in a bulk edit can be selected. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to save a Metadata Record part way through its creation so that all Metadata attributes can be completed according to End Users’ schedules. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for Metadata to be periodically saved (automatically) so that the Metadata attributes being processed are not lost. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides the capability to navigate to where a Dataset is located and insert that address (e.g. URI, URL, file path) into the Metadata Record of that Dataset so that the likelihood of inserting the wrong location into the Dataset's Metadata is reduced. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to paste information into a Metadata attribute so that attribute information can be transferred between records or use information that is held elsewhere (e.g. a document or spreadsheet). | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to share Metadata Record(s) such as XML, in both the full internal and cleansed external format. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides a service that will allow the owner of a Dataset to be notified (if they so wish) of any changes that are being made to the Metadata that describes that Dataset to ensure Metadata and data are aligned. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to populate the Metadata with a flag/filter with a flag/filter according to which data platforms and applications the Datasets are hosted in. e.g. internal data stores, internal and external corporate web applications, e.g. SPIRE/MAGIC, DSP, ArcGIS Online, ArcGIS Enterprise federated portals, partner data portals so that source data can be located more easily. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for the creation and updating of Metadata for Non-Spatial Datasets to be as simple as possible (i.e. simplified End User Interface/templates for Non-Spatial rather than standard Spatial interface). | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to provide a repository for all Defra Group Metadata. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to enable management of Metadata for all types of Authority Data. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to create Metadata for third party Datasets. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to have a unique file identifier that is assigned to each Metadata Record which does not change when the Metadata Record itself is changed. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for optional attributes of different types of Datasets so that Technical Leads can leave these attributes empty and are not forced to enter 'dummy values'. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to see which Metadata attributes are mandatory and which are optional. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to define both the official name and an alternative title for some (or all) Datasets. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for a method of selecting existing Metadata Records and bulk editing specific attributes (e.g. owner details, new Metadata attributes) | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to define one or more Metadata attributes that link to a place where additional resource information is held (e.g. how to use the Authority Data, evidence reports). | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to state who the owners are of both the Dataset and the Metadata Record that describes it. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to be able to add contact information (which includes email address and telephone details) and Data Owner to a Metadata Record. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to be able to assign parent and child status to Metadata Records, where necessary and to be preserved when new versions of the Metadata Records are created. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to indicate any Licence and access restrictions for a Dataset. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to import definitions of new/revised geographical areas (e.g. new water catchment boundaries, revised Authority operational boundaries).[[10]](#footnote-11) | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to define geographic extent using different coordinate systems such as British National Grid, WGS84, ETRS89, WGS84 Mercator, etc. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution provides a Metadata template that only displays fields that require End User entry and relevant to specific Datasets e.g. Spatial fields are not required for Non-Spatial Authority Data. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to search for Metadata information and then select, report and export/publish a list of Metadata attributes in a variety of formats (including text, CSV and XML formats) so that information (End Users are entitled to see) in other applications can be used or communicated to others. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to report in detail on which Metadata Records have not been completed or have failed validation against the Metadata schema and how long they have been left as such so that the quality of our Metadata can be monitored and identify who needs to take action to improve the situation. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution has the capability to bulk export all Metadata Records out of the Metadata Catalogue so that off-line copy of the Authority Data can be used outside of the system. | ATP1 |
|  | The Supplier shall ensure that the Supplier Solution ensures End Users are prompted to review/update Metadata Records they are responsible for, at an agreed interval so that Authority Data and Metadata is kept up to date. | ATP2 |
|  | The Supplier shall ensure that the Supplier Solution has the capability for each Defra Group organisation to be able to publish (harvest) its own Metadata so that any Defra Group organisation can act autonomously. | ATP1 |

**Annex O – Optional Service: Web Mapping**

| **ID** | **Requirement** |
| --- | --- |
| FR\_WM\_1 | The Supplier shall ensure that the Supplier Solution provides the capabilities to create web mapping applications, combining Datasets from DSP into simple web mapping applications for End Users. |
| FR\_WM\_2 | The Supplier shall ensure that the Supplier Solution has the capability to add functionality from a catalogue of web mapping application data at different zoom extents/display scales relevant to all services. |
| FR\_WM\_3 | The Supplier shall ensure that the Supplier Solution has the capability to use drawing tools that can edit and style on an interactive map. |
| FR\_WM\_4 | The Supplier shall ensure that the Supplier Solution provides the capability to search within a data layer that is available on a Web Mapping Service, so that End Users can interrogate and select relevant objects or attributes in data. |
| FR\_WM\_5 | The Supplier shall ensure that the Supplier Solution provides the capability for measurement tools to find the area or perimeter of a feature so that End Users can attain the size of a feature defined on a Web Mapping Service. |
| FR\_WM\_6 | The Supplier shall ensure that the Supplier Solution has the capability to use measurement tools to find distance on an interactive map. |
| FR\_WM\_7 | The Supplier shall ensure that the Supplier Solution provides location when End Users click on an interactive map so that End Users can return the grid reference, Easting/Northing, NGR, Postcode District or other Spatial references. |
| FR\_WM\_8 | The Supplier shall ensure that the Supplier Solution provides the capability to create a map layout and share as a unique URL. |
| FR\_WM\_9 | The Supplier shall ensure that the Supplier Solution provides the capability to query data on an interactive map. |
| FR\_WM\_10 | The Supplier shall ensure that the Supplier Solution provides Spatial analysis tools such as the ability to buffer. |
| FR\_WM\_11 | The Supplier shall ensure that the Supplier Solution provides the capability to select/deselect features in a Dataset by area or attribute. |
| FR\_WM\_12 | The Supplier shall ensure that the Supplier Solution provides the capability to create a map and export as an image file. |
| FR\_WM\_13 | The Supplier shall ensure that the Supplier Solution provides the capability to create a map legend for all data layers added to a map. |
| FR\_WM\_14 | The Supplier shall ensure that the Supplier Solution has the capability to search all layers in the services table of contents listed by Theme, subtheme and minimum/maximum display scale. |
| FR\_WM\_15 | The Supplier shall ensure that the Supplier Solution adheres to standard coordinate systems as defined by the Authority and in-line with reporting commitments, such as those defined under the INSPIRE Regulations. |
| FR\_WM\_16 | The Supplier shall ensure that the Supplier Solution has the capability for End Users to pan, zoom in and out and query on an interactive map. |
| FR\_WM\_17 | The Supplier shall ensure that the Supplier Solution has the capability to load End User data as a map/feature/WMS or Spatial file formats such as shapefile/personal geodatabase etc. |
| FR\_WM\_18 | The Supplier shall ensure that the Supplier Solution has the capability to select layers and set the visible scale range so that End Users can ensure data is only visible at set zoom scales. |
| FR\_WM\_19 | The Supplier shall ensure that the Supplier Solution has the capability to access an interactive Help menu that can be searched by End Users. |
| FR\_WM\_20 | The Supplier shall ensure that the Supplier Solution provides the capability for an interactive map service to be created and that can be shared with public facing End Users. |
| FR\_WM\_21 | The Supplier Solution shall ensure that the Supplier Solution has the capability to load multiple data layers including OS background mapping scales. |
| FR\_WM\_22 | The Supplier shall ensure that the Supplier Solution has the capability to search by a range of Spatial references such as County, Place, Postcode, Region or Coordinate/Position. |
| FR\_WM\_23 | The Supplier shall ensure that the Supplier Solution has the capability to select and add data layers to an interactive map. |
| FR\_WM\_24 | The Supplier shall ensure that the Supplier Solution has the capability to search and Download data layers in a range of file formats. |
| FR\_WM\_26 | The Supplier shall ensure that the Supplier Solution has the capability to specify customised requirements to develop services. |
| FR\_WM\_27 | The Supplier shall ensure that the Supplier Solution has capability to allow scheduled changes/updates, such as to data and the End User Interface, to be made to the service. |
| FR\_WM\_28 | The Supplier shall ensure that the Supplier Solution has the capability to accommodate hyperlinks within the map End User Interface to further sources of information. |
| FR\_WM\_29 | The Supplier shall ensure that the Supplier Solution has the capability that allows calls by third party websites via a URL and URL parameters. |
| FR\_WM\_30 | The Supplier shall ensure that the Supplier Solution allows storage of supporting documents and files in a range of formats. |

**Annex P – Optional Service: Data Visualisation**

| **ID** | **Requirement** |
| --- | --- |
| FR\_DV\_1 | The Supplier shall ensure that the Supplier Solution has the capability for allocated Internal Users to create web-based data visualisation/dashboard applications combining Datasets so that data visualisations can be published on the DSP. |
| FR\_DV\_2 | The Supplier shall ensure that the Supplier Solution has the capability for allocated Internal Users to add functionality from a catalogue of components to a data visualisation/dashboard application so that data visualisations can be published on the DSP. |
| FR\_DV\_3 | The Supplier shall ensure that the Supplier Solution has the capability for allocated Internal Users to prepare Authority Data held on the DSP so that data visualisations can be created. |
| FR\_DV\_4 | The Supplier shall ensure that the Supplier Solution provides the capability for allocated Internal Users to create data visualisations from Authority Data held on the DSP so that Internal Users can publish them on the DSP. |
| FR\_DV\_5 | The Supplier shall ensure that the Supplier Solution provides the capability for allocated Internal Users to create customisable dashboards to provide insights into Authority Data so that data visualisations can be published on the DSP. |
| FR\_DV\_6 | The Supplier shall ensure that the Supplier Solution provides the capability for allocated Internal Users to understand and visualise trends e.g. using graphs or charts, in Authority Data so that data visualisations can be published on the DSP. |
| FR\_DV\_7 | The Supplier shall ensure that the Supplier Solution provides the capability for allocated Internal Users to view Authority Data through a range of chart and graph types so that data visualisations can be published on the DSP. |
| FR\_DV\_8 | The Supplier shall ensure that the Supplier Solution provides the capability for allocated Internal Users to visualise data quality metrics in data attributes and publish them on the DSP. |
| FR\_DV\_9 | The Supplier shall ensure that the Supplier Solution provides the capability for allocated Internal Users to navigate between dashboards and Datasets published on the DSP. |
| FR\_DV\_10 | The Supplier shall ensure that the Supplier Solution provides the capability for allocated Internal Users to update data visualisations published on the DSP when Authority Data held on the DSP are updated. |
| FR\_DV\_11 | The Supplier shall ensure that the Supplier Solution provides the capability for allocated Internal Users to create templates so that data visualisations can be published on the DSP. |
| FR\_DV\_12 | The Supplier shall ensure that the Supplier Solution provides the capability for allocated Internal Users to create data animations so that data visualisations can be published on the DSP and data insights can be understood and communicated. |

**Annex Q – Linked Data Apps**

The Apps set out in this section have been delivered as Linked Data and available on the Semantic Web. A core aim of the DSP is to support our objectives through the implementation of 5-star Open Data. It is recognised that the full benefits of 5-star Open Data have not yet been fully realised. As shown below in Figure 1, many of the applications outlined in this Annex might only be considered 4-star Open Data. Progression is sought to realise this ambition fully with the following benefits envisaged:

* Increasing the value of the Authority Data through the network effect;
* Defining and use of internal and external reference data;
* Discovering more (related) Authority Data while End Users consume the Authority Data;
* Maximise and support joined-up policy making;
* Enabling other publishers to link to Defra Group Authority Data;
* Making Authority Data fully discoverable.

Figure 2outlines the progress of applications published in support of 5-star Open Data in support of environmental planning. Further work is required to improve the links between the underlying Authority Data in the relevant Apps, in addition to defining external relationships. It is recognised that to fulfil this there may be amendments required in to improve the source Authority Data in addition to work in delivering these links.

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Figure 1: 5-star deployment scheme for Open Data[[11]](#footnote-12)

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Figure 2: 5-star deployment scheme for Environment Management

| **ID** | **Service** | **Requirement** | **Latest Milestone** |
| --- | --- | --- | --- |
| LA\_1 | Asset Management API | The Supplier shall ensure that the Supplier Solution provides the capability to host and publish the API as documented https://environment.data.gov.uk/asset-management/doc/reference# on the Semantic Web as Linked Data. | ATP1 |
| LA\_2 | Asset Information | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to explore maps of key flood and coastal risk management asset management Datasets approved as Open Data, including maintained assets, capital schemes and completed capital schemes. | ATP1 |
| LA\_3 | Asset Information | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to pan, zoom in and out, query and search by place or postcode. | ATP1 |
| LA\_4 | Asset Information | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to search by asset/project ID as held in the asset inventory Authority Data. | ATP1 |
| LA\_5 | Asset Information | The Supplier shall ensure that the Supplier Solution ensures underlying asset inventory Authority Data is automatically updated every week. | ATP1 |
| LA\_6 | Bathing Waters API | The Supplier shall ensure that the Supplier Solution provides the capability to host and publish the API as documented https://environment.data.gov.uk/bwq/doc/api-reference-v0.6.html# on the Semantic Web as Linked Data. | ATP1 |
| LA\_7 | Bathing Water Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to explore England's bathing water profiles by name or location, via an interactive map. | ATP1 |
| LA\_8 | Bathing Water Explorer | The Supplier shall ensure that the Supplier Solution provides the details of weekly Environment Agency water quality assessments and at certain sites daily pollution risk forecasts. | ATP1 |
| LA\_9 | Bathing Water Explorer | The Supplier shall ensure that the Supplier Solution provides annual ratings for bathing water sites. | ATP1 |
| LA\_10 | Bathing Water Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to pan, zoom in and out, query and search by place or postcode. | ATP1 |
| LA\_11 | Bathing Water Signage | The Supplier shall ensure that the Supplier Solution provides the capability for controllers of bathing waters to create and Download display signs which comply with the Bathing Water Regulations 2013. | ATP1 |
| LA\_12 | Bathing Water Signage | The Supplier shall ensure that the Supplier Solution provides the capability to search for a bathing water by name, bathing water ID or by the name of the local authority. | ATP1 |
| LA\_13 | Bathing Water Signage | The Supplier shall ensure that the Supplier provides the capability to create a “simple sign” for a selected bathing water. | ATP1 |
| LA\_14 | Bathing Water Signage | The Supplier shall ensure that the Supplier Solution provides the capability to create an “enhanced sign” by allowing End Users to select additional fields presented to the End User. | ATP1 |
| LA\_15 | Bathing Water Widgets | The Supplier shall ensure that the Supplier Solution provides the capability to enable templates (single bathing water, comparison and on-site) for web designers to create web Widgets showing Environment Agency bathing water quality information in their own websites. | ATP1 |
| LA\_16 | Bathing Water Widgets | The Supplier shall ensure that the Supplier Solution provides the capability for the selected template to be configured and End Users create their own web Widget for use on their own web site. | ATP1 |
| LA\_17 | Catchment Data API | The Supplier shall ensure that the Supplier Solution provides the capability to host and publish the API as documented https://environment.data.gov.uk/catchment-planning/ui/reference# on the Semantic Web as Linked Data. | ATP1 |
| LA\_18 | Catchment Data Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to explore and Download information about the water environment (supporting and building on the Authority Data in the Environment Agency's river basin management plans). | ATP1 |
| LA\_19 | Catchment Data Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to pan, zoom in and out, query and search by place name or postcode. | ATP1 |
| LA\_20 | Catchment Data Explorer | The Supplier shall ensure that the Supplier Solution provides the capability to search by coordinates or catchment or waterbody name. | ATP1 |
| LA\_21 | Catchment Data Explorer | The Supplier shall ensure that the Supplier Solution provides the capability to make available water catchment areas, water bodies of interest and summary information about catchments. | ATP1 |
| LA\_22 | Flood Monitoring API | The Supplier shall ensure that the Supplier Solution provides the capability to host and publish the API as documented https://environment.data.gov.uk/flood-monitoring/doc/reference# on the Semantic Web as Linked Data. | ATP1 |
| LA\_23 | Flood Warning Widgets | The Supplier shall ensure that the Supplier Solution provides the capability for Professional Users to embed Environment Agency flood warnings (summaries of flood alerts and warnings) into pages on their websites as a flood warning Widget. | ATP1 |
| LA\_24 | Hydrology API | The Supplier shall ensure that the Supplier Solution provides the capability to host and publish the API as documented https://environment.data.gov.uk/hydrology/doc/reference on the Semantic Web as Linked Data. | ATP1 |
| LA\_25 | Hydrology | The Supplier shall ensure that the Supplier Solution provides the capability to view open access to Environment Agency hydrology Authority Data for England, e.g. river flow, on an interactive map. | ATP1 |
| LA\_26 | Hydrology | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to pan, zoom in and out, query and search by place name or postcode. | ATP1 |
| LA\_27 | Hydrology | The Supplier shall ensure that the Supplier Solution provides the capability to search by coordinates, station name or WISKI ID. | ATP1 |
| LA\_28 | Hydrology | The Supplier shall ensure that the Supplier Solution provides the capability to toggle UK centre for ecology and hydrology (**“UKCEH”**) river layers on the interactive map. | ATP1 |
| LA\_29 | Hydrology | The Supplier shall ensure that the Supplier Solution provides the capability to filter by station type. | ATP1 |
| LA\_30 | Hydrology | The Supplier shall ensure that the Supplier Solution provides the capability to Download the Authority Data in CSV or Excel format. | ATP1 |
| LA\_31 | Hydrology | The Supplier shall ensure that the Supplier Solution provides the capability to check the raw Authority Data prior to daily update. | ATP1 |
| LA\_32 | Public Registers API | The Supplier shall ensure that the Supplier Solution provides the capability to host and publish the API as documented https://environment.data.gov.uk/public-register/view/api-reference# on the Semantic Web as Linked Data. | ATP1 |
| LA\_33 | Public Registers Online | The Supplier shall ensure that the Supplier Solution provides a service which makes registers of licences held by industry, businesses and individuals available to the public. Such licences cover certain activities that have the potential to pollute the environment. | ATP1 |
| LA\_34 | Public Registers Online | The Supplier shall ensure that the Supplier Solution provides the capability to make available licences that cover environmental permits, contaminated land, water resources, water quality, waste and emissions trading. | ATP1 |
| LA\_35 | Public Registers Online | The Supplier shall ensure that the Supplier Solution provides the capability to comply with the Environmental Regulations by making them public.  | ATP1 |
| LA\_36 | Waste Carriers, Brokers and Dealers Widget | The Supplier shall ensure that the Supplier Solution provides a waste carriers, brokers and dealers Widget to provide a simple way for registered parties to demonstrate on their own website that they have registered with the Environment Agency for their activities. | ATP1 |
| LA\_37 | Water Quality Data Archive API | The Supplier shall ensure that the Supplier Solution provides the capability to host and publish the API as documented https://environment.data.gov.uk/water-quality/view/doc/reference on the Semantic Web as Linked Data. | ATP1 |
| LA\_38 | Water Quality Data Archive | The Supplier shall ensure that the Supplier Solution provides the capability to explore Authority Data on water quality measurements, including samples for coastal, estuarine waters, rivers, lakes, ponds, canals and groundwater for England on an interactive map. | ATP1 |
| LA\_39 | Water Quality Data Archive | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to pan, zoom in and out, query and search by place name. | ATP1 |
| LA\_40 | Water Quality Data Archive | The Supplier shall ensure that the Supplier Solution provides the capability to search by sample point name/ID, environment area, and sampling point type. | ATP1 |
| LA\_41 | Water Quality Data Archive | The Supplier shall ensure that the Supplier Solution provides the capability for an End User to tap the map to select a single point or enter the easting and northing values. | ATP1 |
| LA\_42 | Water Quality Data Archive | The Supplier shall ensure that the Supplier Solution provides the capability to limit the maximum number of results to 500, 1000 or 25000. | ATP1 |
| LA\_43 | Water Quality Data Archive | The Supplier shall ensure that the Supplier Solution provides the capability to demonstrate compliance to discharge permits, investigate pollution incidents and for general environmental monitoring. | ATP1 |
| LA\_44 | Water Quality Data Archive | The Supplier shall ensure that the Supplier Solution provides the capability to select by area, year and purpose to Download the Authority Data in CSV format. | ATP1 |
| LA\_45 | Asset Data Requirements Library API | The Supplier shall ensure that the Supplier Solution provides the capability to host and publish the API as documented https://environment.data.gov.uk/asset-management/drl-app/revision/current/api/doc on the Semantic Web as Linked Data. | ATP1 |
| LA\_46 | Asset Data Requirements Library | The Supplier shall ensure that the Supplier Solution provides the capability to document the specific Authority Data attributes that are used to describe the properties of each asset type and its element types. | ATP1 |
| LA\_47 | Asset Data Requirements Library | The Supplier shall ensure that the Supplier Solution provides the capability for view history and all changes to be accessed for each asset and element Type. | ATP1 |
| LA\_48 | Ecology & Fish Data API | The Supplier shall ensure that the Supplier Solution provides the capability to host and publish the API as documented https://environment.data.gov.uk/ecology/api/v1/index.html on the Semantic Web as Linked Data. | ATP1 |
| LA\_49 | Ecology & Fish Data Explorer | The Supplier shall ensure that the Supplier Solution provides the capability to view freshwater fish, macroinvertebrate, diatom and macrophyte Authority Data on an interactive map. | ATP1 |
| LA\_50 | Ecology & Fish Data Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to pan, zoom in and out, query and search by End User defined area. | ATP1 |
| LA\_51 | Ecology & Fish Data Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to select between OpenStreetMap, OpenTopoMap, Esri WorldTopoMap, and Esri WorldImagery Base mapping. | ATP1 |
| LA\_52 | Ecology & Fish Data Explorer | The Supplier shall ensure that the Supplier Solution provides the capability to refine the Authority Data for fish, invertebrates, macrophytes or diatoms and filter by site (Name/ID, top tier site, geo waterbody, species name or survey date. | ATP1 |
| LA\_53 | Ecology & Fish Data Explorer | The Supplier shall ensure that the Supplier Solution provides the capability to set filters for fish, invertebrates, macrophytes or diatoms Datasets by selecting year of interest. | ATP1 |
| LA\_54 | Ecology & Fish Data Explorer | The Supplier shall ensure that the Supplier Solution provides the capability to Download the Authority Data that has been filtered by the End User. | ATP1 |
| LA\_55 | Tide Gauge API | The Supplier shall ensure that the Supplier Solution provides the capability to host and publish the API as documented https://environment.data.gov.uk/flood-monitoring/doc/tidegauge# on the Semantic Web as Linked Data. | ATP1 |
| LA\_56 | Tide Gauge Readings | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to explore the United Kingdom's tide gauge stations and readings by station name or location, via an interactive map. | ATP1 |
| LA\_57 | Tide Gauge Readings | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to pan, zoom in and out, query and search by place or postcode. | ATP1 |
| LA\_58 | Tide Gauge Readings | The Supplier shall ensure that the Supplier Solution provides the capability to select a time series for 1-, 7- or 30-day series. | ATP1 |
| LA\_59 | Tide Gauge Readings | The Supplier shall ensure that the Supplier Solution provides the capability to view the tide gauge trends over the selected period. | ATP1 |
| LA\_60 | Tide Gauge Readings | The Supplier shall ensure that the Supplier Solution provides the capability to access and Download the Authority Data for the tide gauge, measures and readings as a webpage, spreadsheet or JSON. | ATP1 |
| LA\_61 | Rainfall API | The Supplier shall ensure that the Supplier Solution provides the capability to host and publish the API as documented https://environment.data.gov.uk/flood-monitoring/doc/rainfall# on the Semantic Web as Linked Data. | ATP1 |
| LA\_62 | Rainfall Demonstrator | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to explore England's rainfall profiles by station ID or location, via an interactive map. | ATP1 |
| LA\_63 | Rainfall Demonstrator | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to pan, zoom in and out, query and search by place or postcode. | ATP1 |
| LA\_64 | Rainfall Demonstrator | The Supplier shall ensure that the Supplier Solution provides the capability to search by Station ID. | ATP1 |
| LA\_65 | Rainfall Demonstrator | The Supplier shall ensure that the Supplier Solution provides the capability to view rainfall time series Authority Data. | ATP1 |
| LA\_66 | Data Flow Maps | The Supplier shall ensure that the Supplier Solution provides the capability to host and publish the API as published on https://defra-prod.publishmydata.com on the Semantic Web as Linked Data. | ATP1 |
| LA\_67 | Data Flow Maps | The Supplier shall ensure that the Supplier Solution provides the capability to map dependencies between Datasets and systems and display on an End User Interface. | ATP1 |
| LA\_68 | Data Flow Maps | The Supplier shall ensure that the Supplier Solution provides integration with the Metadata Catalogue via API so that Data Flow Maps are updated with Metadata. | ATP1 |
| LA\_69 | Data Flow Maps | The Supplier shall ensure that the Supplier Solution provides the capability to structure and capture the Environment Agency's standard Record of Processing Activity template so that Data Owners can undertake a data protection impact assessment. | ATP1 |
| LA\_70 | Data Flow Maps | The Supplier shall ensure that the Supplier Solution provides bulk export Record of Processing Activity data stored in Data Flow Maps so End Users can share data and respond to requests such as from the Information Commissioner’s Office. | ATP1 |
| LA\_71 | Flood Plan Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to view, interrogate and search England's flood risk management plans by name or location, via an interactive map. | ATP1 |
| LA\_72 | Flood Plan Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to explore England's flood risk management plans by name or location, via an interactive map. | ATP1 |
| LA\_73 | Shoreline Management Plan Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to view, interrogate and search England's shoreline management plans by name or location, via an interactive map. | ATP1 |
| LA\_74 | Shoreline Management Plan Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for updates for action plans and policy clarifiers with associated policy statements, detailed by coastal groups, to be hosted alongside the map End User Interface. | ATP1 |
| LA\_75 | Shoreline Management Plan Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for shoreline management plans to be queried on an interactive map End User Interface. | ATP1 |
| LA\_76 | Integrated Environmental Data Service  | The Supplier shall ensure that the Supplier Solution provides the capability for a unified API and query capability service. | ATP1 |
| LA\_77 | Integrated Environmental Data Service | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to self-publish Linked Data and set up and define criteria-based queries. | ATP1 |
| LA\_78 | Integrated Metadata Dashboard | The Supplier shall ensure that the Supplier Solution provides the capability for Metadata to be consumed from internal (e.g. Metadata Catalogue) and external sources as feeds (JSON) and viewed through an interactive End User Interface. | ATP1 |
| LA\_79 | Integrated Metadata Dashboard | The Supplier shall ensure that the Supplier Solution provides the capabilities to receive updates from Metadata repositories to ensure records are kept up to date. | ATP1 |
| LA\_80 | Integrated Metadata Dashboard | The Supplier shall ensure that the Supplier Solution provides the capability to link Metadata Records to a description of initiatives or projects that are being progressed to deliver business outcomes. | ATP1 |
| LA\_81 | Integrated Metadata Dashboard | The Supplier shall ensure that the Supplier Solution provides the capability to record data, as an inventory, required or used for a specific project or initiative using Metadata consumed through the dashboard. | ATP1 |
| LA\_82 | Integrated Metadata Dashboard | The Supplier shall ensure that the Supplier Solution provides the capability to search and interrogate Metadata through default criteria as defined by the Authority for projects, initiatives and data used within them | ATP1 |
| LA\_83 | Integrated Data Explorer | The Supplier shall ensure that the Supplier Solution provides the capability to integrate data from the data explorer (available on the [DSP app gallery](https://environment.data.gov.uk/appgallery)) through an End User Interface. | ATP1 |
| LA\_84 | Integrated Data Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for integrated data to be visualised on an interactive map. | ATP1 |
| LA\_85 | Integrated Data Explorer | The Supplier shall ensure that the Supplier Solution provides the capability to search and interrogate integrated data, through default criteria as defined by the Authority, and visualised through an End User Interface. | ATP1 |
| LA\_86 | Water Network Explorer | The Supplier shall ensure that the Supplier Solution provides the capability to publish the water network as a OGC API Feature Service with appropriate authentication to allow End Users to accept an End User Licence. | ATP1 |
| LA\_87 | Water Network Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for the water network to be associated with monitoring site locations published on the DSP. | ATP1 |
| LA\_88 | Water Network Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for the water network and associated monitoring sites to be queried on an interactive map. | ATP1 |
| LA\_89 | Water Network Explorer | The Supplier shall ensure that the Supplier Solution provides the capability to search and interrogate the water network and associated monitoring sites, through default criteria as defined by the Authority, and visualised through an End User Interface. | ATP1 |
| LA\_90 | Water Network Explorer | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to identify, highlight and report improvements or errors in the association between monitoring site and water network stretch. | ATP1 |
| LA\_91 | Climate Change Knowledge Hub | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to consume and host resources relevant to climate change, such as research, policy and guidance documentation aligned to Authority Data held on the DSP. | ATP1 |
| LA\_92 | Climate Change Knowledge Hub | The Supplier shall ensure that the Supplier Solution provides the capability to create a community of End Users to share information and create forums to discuss issues specific to climate change. | ATP1 |
| LA\_93 | Environment Registry | The Supplier shall ensure that the Supplier Solution provides the capability to publish managed sets of code lists as Linked Data as found at environment.data.gov.uk/registry. | ATP1 |
| LA\_94 | Environment Registry | The Supplier shall ensure that the Supplier Solution provides the capability for a registry that supports End User browsing, API access and retrieving resources via a URI (URI dereferencing). | ATP1 |
| LA\_95 | Location Registry | The Supplier shall ensure that the Supplier Solution provides the capability to publish managed sets of code lists as Linked Data as found at location.data.gov.uk/registry. | ATP1 |
| LA\_96 | Location Registry | The Supplier shall ensure that the Supplier Solution provides the capability for a registry to support Spatial Data Services such as the Gemet vocabulary. | ATP1 |

**Annex R – Non-Linked Data Apps**

| **ID** | **Service** | **Requirement** | **Latest Milestone** |
| --- | --- | --- | --- |
| NA\_1 | Drinking Water | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to view surface and groundwater safeguard zone action plans at https://environment.data.gov.uk/farmers. | ATP1 |
| NA\_2 | Drinking Water | The Supplier shall ensure that the Supplier Solution provides a mandatory set of rules outlining management of nitrogen fertiliser and organic manure. | ATP1 |
| NA\_3 | Safeguard Zones and NVZs | The Supplier shall ensure that the Supplier Solution provides the capability to host drinking water safeguard zones (surface and groundwater) and nitrate vulnerability zone maps, available at <https://environment.data.gov.uk/farmers/>. | ATP1 |
| NA\_4 | Safeguard Zones and NVZs | The Supplier shall ensure that the Supplier Solution provides the capability to draw an area on the map to select all applicable zones within a defined area. | ATP1 |
| NA\_5 | Safeguard Zones and NVZs | The Supplier shall ensure that the Supplier Solution provides the capability to turn selected zones on/off. | ATP1 |
| NA\_6 | Safeguard Zones and NVZs | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to pan, zoom in and out, query and search by place or address. | ATP1 |
| NA\_7 | Rural Payments Agency Land API | The Supplier shall ensure that the Supplier Solution provides the capability to replicate the functionality for the API as outlined in https://environment.data.gov.uk/rpa/api | ATP1 |
| NA\_8 | Rural Payments Agency Land | The Supplier shall ensure that the Supplier Solution provides the capability for farmers, land managers and land agents to obtain a current snapshot of their land data held by the rural payments agency (**“RPA”**) by consuming it as a map service. | ATP1 |
| NA\_9 | Rural Payments Agency Land | The Supplier shall ensure that the Supplier Solution provides the capability for farmers, land manager and land agents access land parcels, land cover, and hedges that are recorded for EFA and countryside stewardship by their single business identifier (**“SBI”**). | ATP1 |
| NA\_10 | Data Standards Registry | The Supplier shall ensure that the Supplier Solution provides the capability to host a registry to enable End Users to publish controlled list and data standards registers. | ATP1 |
| NA\_11 | Data Standards Registry | The Supplier shall ensure that the Supplier Solution provides the capability to develop controlled lists of common terms to achieve data consistency across applications and Business Areas. | ATP1 |
| NA\_12 | Data Standards Registry | The Supplier shall ensure that the Supplier Solution provides the capability to discover published data standards. | ATP1 |
| NA\_13 | Data Standards Registry | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to be notified of data standard changes so that standards can be kept up to date. | ATP1 |
| NA\_14 | Data Standards Registry | The Supplier shall ensure that the Supplier Solution provides the capability to allow End Users to identify data standards specifications. | ATP1 |
| NA\_15 | Data Standards Registry | The Supplier shall ensure that the Supplier Solution provides the capability to allow End Users to be able to identify status and compliance levels of relevant data standards that have been published. | ATP1 |
| NA\_16 | Data Standards Registry | The Supplier shall ensure that the Supplier Solution provides the capability to access to a data standard so that it can be implemented. | ATP1 |
| NA\_17 | Marine Activity Data | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to explore [Marine plan policies](https://explore-marine-plans.marineservices.org.uk/) via an interactive map by allowing an End User to define a specific area. | ATP1 |
| NA\_18 | Marine Activity Data | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to pan, zoom in and out and query on an interactive map. | ATP1 |
| NA\_19 | Marine Activity Data | The Supplier shall ensure that the Supplier Solution provides the capability for End Users to toggle on/off pre-defined Spatial Authority Data layers. | ATP1 |
| NA\_20 | Marine Activity Data | The Supplier shall ensure that the Supplier Solution provides the capability for documents, relevant to a marine plan policy, to be accessible via an associated link. | ATP1 |
| NA\_21 | Reservoir Flood Maps | The Supplier Solution shall provide the capability to search for a reservoir flood map by name of the reservoir, lead local flood authority or undertaker. | ATP1 |
| NA\_22 | Reservoir Flood Maps | The Supplier Solution shall provide the capability to display search results and download reservoir flood maps in portable digital format (.pdf) and map extents in GIS format. | ATP1 |

**Annex S – Transferred Software**

| **Unique application identification number** | **Application name** | **Application Description** | **Service level tier categorisation** | **The Authority entities/sub-groups that use the application** | **Application systems documentation** | **Other relevant application information** |
| --- | --- | --- | --- | --- | --- | --- |
| DEF-APP-CORE-UI | DSP Core UI | UI for the main Defra DSP Application | Normal/Heightened | Public, Defra and Departments, Administrators | Confluence :: Architecture Diagram, General new starter guide for explanation, Hosting :: GitHub Defra--Core-UI | Angular9 Typescript Application, Hosted within a WebAPI Shell, some lazy-loaded modules |
| DEF-APP-CORE-API | DSP Core API | API for the main Defra DSP Application | Normal/Heightened | Public, Defra and Departments, Administrators | Confluence :: Architecture Diagram, General new starter guide for explanation, Integrated :: SpecFlow BDD Tests, Hosting :: Git Hub Defra--Core-API | C# .Net Core 2.1 WebAPI Application, Db scripts within a folder and automatically applied via Liquibase, Fluent Nhibernate ORM, Hangfire orchestrating Scheduled Tasks, Swashbuckle/Swagger API documentation, StructureMap Dependency Injection wired into WebAPI |
| DEF-APP-CORE-PROXY | DSP Core Proxy | Proxy for WMS/WFS services that allows for Agnostic URLs instead of the ESRI Specific ones | Normal/Heightened | Public | Confluence :: Architecture Diagram, Integrated :: SpecFlow BDD Tests, Hosting :: GitHub Defra--Core-Proxy | C# .Net Core 2.1 WebAPI Application, Db scripts within a folder and automatically applied via Liquibase |
| DEF-APP-AUTH0 | DSP Auth0 | Support functions for Auth0 for augmenting the Auth Token | Normal/Heightened | Internal | Hosting :: Defra--Auth0 | Javascript Rules, Pages html, can be hooked up to Auth0 automatically |
| DEF-APP-CORE-AZUREFUNCTIONS | DSP Core Azure Functions | Azure Functions to support Order Processing from Azure Queues | Normal/Heightened | Internal | Confluence :: ArchitectureDiagram, Github Defra--Azure-functions | C# .Net Core 3.1 Azure Functions v2 Application |
| DEF-APP-AGNOSTIC-UI | DSP Agnostic Tool UI | UI for the Agnostic Admin Tool to allow for more URLs to be added for the Proxy | Normal | GIS Team Members | Confluence :: Architecture Diagram, Hosting :: GitHub Defra--AgnosticUrlTool-UI | Angular7 Typescript Application, Hosted within a WebAPI shell |
| DEF-APP-AGNOSTIC-API | DSP Agnostic Tool API | API for the Agnostic Admin Tool to allow more URLs to be added / modified for the Proxy | Normal | GIS Team Members | Confluence :: Architecture Diagram, Integrated :: SpecFlow BDD Tests, Hosting :: GitHub Defra--AgnosticUrlTool-API | C# .Net Core 2.1 WebAPI Application |
| DEF-ESRI-CHECKFORZONES | DSP Check for Zones | ESRI AppBuilder app for the Drinking Water app | Normal/Heightened | Public, Farmers | Inherited App, Hosted :: GitHub Defra--Checkforzones | ESRI AppBuilder App, Javascript |
| DEF-TOOL-AOI-REMAPPER | DSP AOI Remapper Tool | Tool to remap users from one AOI to another AOI | Normal | Internal Tool | Hosting :: Defra--Aoi-Remapping-Tool | C# .Net Core 2.1 Console App |
| DEF-APP-RESERVOIRS-API | DSP Reservoir Flood Mapping API | API for the Reservoirs Search part of the DSP | Normal/Heightened | Public | Integrated :: SpecFlow BDD Tests, Hosting :: GitHub Defra--Reservoirs-Api | C# .Net Core 3.1 WebAPI Application |
| DEF-ESRI-DATADOWNLOADTOOL | DSP Data Download Tool | ESRI AppBuilder for downloading data and previewing WMS | Normal/Heightened | Public, Defra and Departments, Administrators | Confluence :: Architecture Diagram, ##ESRIDOCS##, Hosting: GitHub Defra--datadownloadtool | ESRI AppBuilder App, Javascript |
|   | AIMS | Asset management data explorer and API | Normal | To be completed by EA? | Documentation available ahead of transfer, if required | Clojure, Vue.js, Javascript |
|   | PRO | Public registers data explorer and API | Normal | To be completed by EA? | Documentation available ahead of transfer, if required | Clojure, Javascript, Java |
|   | Catchment Explorer (new) | Catchment data explorer and API | Normal | To be completed by EA? | Documentation available ahead of transfer, if required | Clojure, Javascript  |
|   | Flood Plan Explorer | Flood risk management plan explorer and API | Normal | To be completed by EA? | Documentation available ahead of transfer, if required | Clojure, Javascript  |
|   | Ecology | Ecology and fish data explorer and API | Normal | To be completed by EA? | Documentation available ahead of transfer, if required | Rshiny app and Clojure API |
|   | Data Flow Mapping | Data Flow Mapping data explorer | Normal | To be completed by EA? | Documentation available ahead of transfer, if required | Clojure |
|   | Shoreline Management Plans | Shoreline Management Plan prototype data explorer | Normal | To be completed by EA? | Documentation available ahead of transfer, if required | Clojure and static HTML |
|   | Bathing Water Quality | Bathing water quality profiles explorer, API, signage widget generator and pollution incidents tool | Normal | To be completed by EA? | Documentation available ahead of transfer, if required | Jasvscript, Java, Ruby |
|   | Water Quality Archive | Water quality archive data explorer and API | Normal | To be completed by EA? | Documentation available ahead of transfer, if required | Jasvscript, Java, Ruby |
|   | PublishMyData | PublishMyData - data explorer, API, management interface |   |   | Documentation available ahead of transfer, if required | Clojure, clojurescript |
|   | Flood Warnings | Flood monitoring and flood warnings API and flood warnings widget generator | Normal (Heightened (99.99% uptime) during times of increased risk of flooding) | To be completed by EA? | Documentation available ahead of transfer, if required | Java, Javascript, Shell scripts, Clojure |
|   | Flood Warnings | Flood monitoring test instance | Normal | To be completed by EA? | Documentation available ahead of transfer, if required | Java, Javascript, Shell scripts, Clojure |
|   | csv2rdf | Tool for converting CSV format data to RDF following the W3C 'CSV on the Web' standards |   |   | Documentation available ahead of transfer, if required | Clojure |
|   | tbl2qb | Wrapper for csv2rdf designed for preparing statistical data cube datasets in RDF format |   |   | Documentation available ahead of transfer, if required | Clojure |

1. The Legacy DSP contains guidance on how records can be updated and approved by the Authority, but improvements are sought. [↑](#footnote-ref-2)
2. The Legacy DSP has this capability. [↑](#footnote-ref-3)
3. The Legacy DSP has the capability to add new templates. Existing templates used in the Legacy DSP are required for ATP1. [↑](#footnote-ref-4)
4. The Legacy DSP has this capability. [↑](#footnote-ref-5)
5. Examples of near real time data are those collected from telemetric sites. An example is hydrology data that is published from telemetry (e.g. Hydrology Data Explorer: https://environment.data.gov.uk/hydrology/landing) [↑](#footnote-ref-6)
6. The Legacy DSP has this capability. [↑](#footnote-ref-7)
7. The Legacy DSP has this capability. [↑](#footnote-ref-8)
8. The Legacy DSP has this capability. [↑](#footnote-ref-9)
9. The Legacy DSP has this capability. [↑](#footnote-ref-10)
10. The Legacy DSP has this capability. [↑](#footnote-ref-11)
11. [5-star Open Data (5stardata.info)](https://5stardata.info/en/) [↑](#footnote-ref-12)