

**INVITATION TO TENDER**

**&**

**STATEMENT OF REQUIREMENT**

**ORR Data Warehouse and Data Portal: Migration, development and build of new solution**

**CPV Code: 48000000-8; 72000000-5**

**Tender Reference: ORR/CT/17-96**

**Purpose of document**

The purpose of this document is to invite proposals for **the migration and development of the data warehouse and data portal** for the Office of Rail and Road (ORR).

This document contains the following sections:

1. Introduction to the Office of Rail and Road

2. Statement of Requirement

3. Tender Proposal & Evaluation Criteria

4. Procurement Procedures

**1. Introduction to the Office of Rail and Road (ORR)**

The Office of Rail and Road is the independent safety and economic regulator of Britain’s railways who now also hold Highways England to account for its day-to-day efficiency and performance, running the strategic road network, and for delivering the five year road investment strategy set by the Department for Transport (DfT).

ORR currently employs approximately 300 personnel and operates from 6 locations nationwide. The majority of personnel are located at ORR’s headquarters, One Kemble Street, London.

Our strategic objectives

**1. A safer railway:** Protecting passengers, the workforce and the travelling public is at the heart of what we do. We will continue to hold industry to account to deliver safety improvements, focusing especially on level crossings, the train-to-platform gap, and through overseeing better design at the outset.

**2. Better customer service:** Our response to the recent ‘super-complaint’ highlights more which can be done to deliver a better deal for passengers in respect of compensation for delays.  We shall, as promised, monitor operators’ progress closely here, as indeed we shall on complaints handling, on provision for disabled passengers, and on information provided during disruptions.

**3. Value for money from the railway:** The rail network is in the middle of a challenging, multi-billion pound investment programme. We want to see the infrastructure owner, train operator and freight company working together to improve efficiency and boost value for money for taxpayers, fare payers and funders. We will continue to monitor and report on Network Rail’s performance to help ensure that it operates as a world-class, efficient asset management company.

**4. Better highways:** Highways England now has a £15bn, five-year plan with eight specific targets. Our role is to monitor its progress on this. These targets include a 40% reduction in the number of people killed or seriously injured by 2020; a road user satisfaction score of 90% by March 2017; clearing 85% of incidents within an hour; and making £1.2 billion of savings on capital expenditure.

**5. Promoting a dynamic and commercially sustainable rail sector:** Our vision for the future will be set out in our first core document outlining the next Periodic Review, “PR18”, which we will consult on from later in the Spring.

Building on the recommendations of the Shaw review, PR18 will consider options for route based regulation, underpinned by a strong system operator and for an effective charging and incentives regime for Network Rail as the network monopoly.

**6. High performing regulation:** Structural and funding changes shaping both the rail and road networks mean that a high performing regulator is more vital than ever. We are continually developing our professional expertise to ensure maximum, positive impact. Working across rail and road in a joined up manner is also supporting us in developing and applying proportionate, risk-based regulation.

Supplying ORR

The ORR procurement unit is responsible for purchasing the goods and services necessary for ORR to achieve its role as the economic and health & safety regulator of the rail industry.

The ORR Procurement unit subscribes to the following values:

* to provide a modern, efficient, transparent and responsible procurement service;
* to achieve value for money by balancing quality and cost;
* to ensure contracts are managed effectively and outputs are delivered;
* to ensure that processes have regard for equality and diversity; and
* to ensure that procurement is undertaken with regard to Law and best practice.

For further information on ORR please visit our website: [www.orr.gov.uk](http://www.orr.gov.uk)

Small and Medium Enterprises

ORR considers that this contract may be suitable for economic operators that are small or medium enterprises (SMEs) and voluntary organisations. However, any selection of tenderers will be based on the criteria set out for the procurement, and the contract will be awarded on the basis of the most economically advantageous tender.

Small and Medium Enterprises and Voluntary Organisations:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Enterprise Category** | **Headcount** | **Turnover** | **or** | | **Balance Sheet Total** |
| **Micro** | **<10** | **≤ € 2 million** | | **≤ € 2 million** | |
|
| **Small** | **<50** | **≤ € 10 million** | | **≤ € 10 million** | |
|
| **Medium** | **<250** | **≤ € 50 million** | | **≤ € 43 million** | |
|
| **Large** | **>251** | **> € 50 million** | | **> € 43 million** | |

Please ensure that you indicate how your organisation is categorised on the Form of Tender document which should be submitted along with your proposal.**2. Statement of Requirement**

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| --- |
| **2.1 Background to the project** |
| The ORR’s Information & Analysis Team is responsible for the publication of official statistics (including eight National Statistics releases) on the GB rail industry and for producing data to support internal ORR staff in their monitoring of Network Rail and HS1.  To align with our strategic objective of supporting a better service to customers, the Information & Analysis Team provides access to high quality data which enables internal staff and the general public (through our official statistics) to make better decisions. ORR needs to provide its users with a better customer experience online, giving our breadth of users the relevant information at the click of a button and finding innovative ways of making our statistics more engaging, impactful and easy to understand.  In April 2010, ORR launched a Data Warehouse for the collation, validation and storage of data. This is a central data repository for all data supplied to ORR by its dutyholders and stakeholders. The Data Warehouse is an SQL-based environment hosted by Crown Hosting Data Centre suite at the Ark Datacentre and supported by MDS Technologies[[1]](#footnote-1). The current Data Warehouse encompasses three environments (DEV, UAT and LIVE) which combined account for around 1.3 TB of storage with a growth rate in excess of 25% per annum. The existing Data Warehouse infrastructure is set up on three servers with nine Virtual Machines (VMs) spread across those three servers.  In May 2011, ORR launched the Data Portal <http://dataportal.orr.gov.uk/> for the dissemination of rail statistics. The Data Portal is a Drupal-based site hosted and supported by UK Cloud and has a single LIVE site. The UK Cloud virtual infrastructure consists of six VMs. Further details on the setup of the existing Data Warehouse and Data Portal infrastructure are included in Annex A.  In 2016, we assessed a range of technical solutions to establish what tools best fitted our current and future needs and addressed the limitations with the current Data Warehouse and Data Portal.  The key recommendations from this review included:   1. Funnelling the dissemination of all internal dashboards, statistical bulletins and data tables through one single point; the ORR Data Portal; 2. Replacing the current Drupal-based Data Portal with Microsoft SharePoint Server 2016; 3. Integrating Microsoft Power BI with the new SharePoint-based Data Portal to create interactive visuals; and 4. Move storage from the current physical servers to cloud-based storage.   This ITT outlines ORR requirements for the development of the new Data Warehouse infrastructure, migration of current data and processes and development of the Data Portal. |
| **2.2 Project Objectives & Scope** |
| As demand for data, both internal and external, has grown since its inception, the limitations of the Data Portal have been exposed and depending on the purpose and format of the data, ORR statistics are accessible through three separate channels, namely:   * internal dashboards accessed through ORR’s internal Content Management System, Box; * National Statistics releases through the ORR’s public website; and * Data tables through the ORR data portal.   The objective is to create a single Data Portal where all ORR statistical outputs, regardless of purpose, are available to users, depending on their user status (i.e. internal, industry, public).  In addition, the current ORR Data Warehouse is based on SQL Server 2008 so to future proof the Data Warehouse and take advantage of additional functionality, ORR wishes to upgrade the existing SQL Server 2008 suite of applications within the new Data Warehouse structure.  Furthermore, in line with the UK Government’s ‘Cloud First’ policy, ORR has recently reviewed its IT strategy and has moved (or plans to move) its critical applications, which includes the Data Warehouse moving to our Azure cloud-based storage.  ORR is heavily reliant on third party support for the existing Data Warehouse and Data Portal infrastructure. ORR envisages that the new setup will enable more in-house management of the Data Warehouse and Data Portal, including customisable webforms and managing the content and layout of the public website. |
| **2.3 Project Outputs, Deliverables and Contract Management** |
| ORR requires a supplier to construct a scalable Azure cloud-based SQL Data Warehouse and associated applications, to replicate the existing Data Warehouse structure and functionality, through data collection, data loading, report development and deployment. This construction will include the migration of all current data, processes and the following applications (or equivalent):   * Microsoft SharePoint drop off library (preferred route for data delivery); * Team Foundation Server (version control); * Microsoft SQL Server Integration Services (ETL process); * Active Server Pages (RIDDOR[[2]](#footnote-2) webform) * Microsoft SQL Server (Database engine); * Microsoft SQL Server Analysis Services (OLAP cubes); * Microsoft SQL Server Reporting Services (Business Intelligence Development Studio reports, Report Server)   This will also include the addition of a webform creation tool to enable dutyholders to input data directly into the Data Warehouse. This tool will provide the functionality to replace the existing RIDDOR webform[[3]](#footnote-3) and allow ORR staff to develop their own, bespoke webforms for other data collections. This tool should be fully customisable so that amendments and deployments can be maintained in-house, rather than be reliant on third party support.  The new cloud-based Azure SQL Data Warehouse will run in parallel to the existing setup and should be subject to iterative user acceptance testing ahead of the formal ‘go live’ date. The supplier will be expected to work alongside the current support provider to ensure no disruption to service during the transition.  In parallel to the Data Warehouse migration and development, ORR requires the supplier to develop a Microsoft SharePoint 2016 based Data Portal interface to the Data Warehouse. The solution must be highly intuitive and have tiered access rights depending on the user; namely internal ORR staff, rail industry stakeholders and the general public. Members of the BI Team should have the ability to create new groups of users with different access rights and to be able to amend existing groups’ access rights.  The Data Portal should give members of the Business Intelligence Team the flexibility to customise the design, layout and content of the Data Portal web pages, limiting reliance on third party support. The Data Portal should also enable the Business Intelligence Team to upload and publish documents in a variety of formats (e.g. pdf, pbix, html, xlsx, xls, ods, csv).  The Data Portal must recognise the sensitivity of data within the Data Warehouse and provide a fully secure access mechanism that has undergone penetration testing. The successful supplier must ensure the connection between the Data Warehouse and the Data Portal is robust to ensure a live connection between the data and presentation layers, where deemed appropriate. ORR will carry out an internal systems accreditation of the solution and the successful supplier must liaise with ORR and remedy any issues raised during this process.  The data that is available within the Data Warehouse has been assessed in line with government guidelines as OFFICIAL. This includes personal data and commercially sensitive financial data and the security of the system must therefore be kept in accordance with this security classification.  The supplier will be required to demonstrate that it has appropriate systems in place to ensure that confidential data from ORR or any stakeholder remains confidential.  We require a fully costed proposal for the following outputs and deliverables:   * Development of cloud-based Azure SQL Data Warehouse including supporting applications (listed in section 2.2) and fully-customisable webform functionality; * Migration of existing DEV, UAT and LIVE environments from current setup including data, loading packages and associated metadata into new Data Warehouse; and * Development of cloud-based Microsoft SharePoint DEV and LIVE Data Portal site with integrated Power BI solution.   Please note you must be able to provide all of the services listed above.  Your proposal should provide a breakdown of costs for the development of the new solution.  The successful supplier will be required to develop a solution that is hosted and supported in a secure cloud environment. The solution must be accompanied by extensive documentation that would enable a third party supplier to host and support the solution. Support for the solution must cover:   * operational performance in terms of the use of the interface and administration area; * the connection between the Data Warehouse and the Data Portal; * the performance and availability of the Data Warehouse and Data Portal; and * upgrades and/or modifications to the functionality of the Data Warehouse and Data Portal.   **Contract Management Requirements**  Following the project inception meeting, we would expect to hold a project management meeting once a week for the first month of the project and once every two weeks thereafter. These meetings can be done remotely.  During the early stages of the project, we would expect there to be a need for a member of the supplier’s project team to spend some time at our offices in London to familiarise themselves with our existing set up. |
| **2.4 Project Timescales** |
| We expect the project to last up to 6 months with the following indicative milestones:   * Beta Data Portal site available for user testing – End of April 2018 * Azure SQL Data Warehouse and associated applications available for parallel testing – End of May 2018 * Data Warehouse and integrated Data Portal live deployment – End of June 2018 |
| **2.5 Budget and Payment Schedule** |
| The indicative budget for this piece of work is £95,000 (including expenses, excluding VAT).  ORR will consider proposals on any payment schedule (including staged payments) based on delivery of agreed milestones. |
| **2.6 Further project related information for bidders** |
| **Intellectual Property Rights**  ORR will own the Intellectual Property Rights for all project related documentation and artefacts.  **Transparency requirements**  Please note ORR is required to ensure that any new procurement opportunity above £10,000 (excluding VAT) is published on Contracts Finder, unless the ORR is satisfied it is lawful not to. Once a contract has been awarded as a result of a procurement process, ORR is required to publish details of who won the contract, the contract value and indicate whether the winning supplier is a SME or voluntary sector organisation.  **Confidentiality**  All consultants working on the project may be required to sign a confidentiality agreement and abide by the Cabinet Office’s protective marking guidelines, which ORR uses to protectively mark a proportion of its information. In addition, the consultant may be required to sign additional confidentiality agreements as required by external stakeholders.  **Sub-Contractors**  Contractors may use sub-contractors subject to the following:   * That the Contractor assumes unconditional responsibility for the overall work and its quality; * That individual sub-contractors are clearly identified, with fee rates and grades made explicit to the same level of detail as for the members of the lead consulting team.   Internal relationships between the Contractor and its sub-contractors shall be the entire responsibility of the Contractor. Failure to meet deadlines or to deliver work packages by a subcontractor will be attributed by ORR entirely to the Contractor. |

**3. Tender Response & Evaluation criteria**

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| **3.1 The Tender Response** |
| The deadline for tender submissions is 13th March 2018 and the procurement process should be concluded by 23rd March 2018 (see section 4). A project inception meeting will be held w/c 19th March 2018  Responses must include explanations of how the outputs and deliverables outlined in section 2 will be achieved within the required timescales, a detailed project plan including costs and timescales and evidence of relevant experience. The following information should be included.  **a) Understanding of customer's requirements**   * Demonstrate an understanding of the requirement and overall aims of the project.   **b) Approach to customer's requirements**   * Provide an explanation of the proposed approach and any methodologies bidders will work to; * Details of your assumptions and/or constraints/dependencies made in relation to the project * A project plan to show how outputs and deliverables will be produced within the required timescales, detailing the resources that will be allocated; * An understanding of the risks, and explain how they would be mitigated to ensure delivery * What support bidders will require from ORR;   c) **Proposed delivery team**   * Key personnel including details of how their key skills, experience and qualifications align to the delivery of the project; and * Project roles and responsibilities * Some relevant examples of previous work that bidders have carried out (e.g. case studies) and at least two relevant reference projects along with contact details of clients   **d) Pricing**  A fixed fee for the project inclusive of all expense. This should include  a breakdown of the personnel who will be involved with the project, along with associated charge rates and anticipated time inputs that can be reconciled to the fixed fee. |
| **3.2 Evaluation Criteria** |
| Tenders will be assessed for compliance with procurement and contractual requirements which will include:   * Completeness of the tender information * Completed Declaration Form of Tender and Disclaimer * Tender submitted in accordance with the conditions and instructions for tendering * Tender submitted by the closing date and time * Compliance with contractual arrangements.   Tenders that are not compliant may be disqualified from the process. We reserve the right to clarify any issues regarding a Bidder’s compliance. It will be at ORR's sole discretion whether to include the relevant Bidder’s response in the next stage of the process.  The contract will be awarded to the Bidder(s) submitting the **‘most economically advantageous tender’**. Tenders will be evaluated according to weighted criteria as follows:  **Methodology (30%)**  The proposal should set out the methodology by which the project requirement will be initiated, delivered and concluded. In particular, it must:  (a) Explain the proposed methodology and delivery mechanisms to ensure that the requirements of this specification are met in terms of quality;  (b) Explain how your organisaton will work in partnership with ORR’s project manager(s) to ensure the requirements are met;  **Delivery (15%)**  The proposal should set out how and when the project requirement will be delivered. In particular, it must:  a) Explain how this work will be delivered to timescale and how milestones will be met, detailing the resources that will be allocated to each stage;  b) Demonstrate an understanding of the risks, and project dependencies and explain how they would be mitigated to ensure project delivery;  c) Explain the resources that will be allocated to delivering the required outcomes/output, and what other resources can be called upon if required.  **Experience (25%)**  The proposal should set out any experience relevant to the project requirement. In particular, it must:  (a) Provide CVs of the consultants who will be delivering the project; and  (b) Highlight relevant experience for this project including experience in the development of beskpoke online applications and integration with existing data warehousing systems.  (c) Illustrate how your experience will enable you to develop and build an easy to use, intuitive solution.  **Cost / Value for money (30%)**  A **fixed fee** for delivery of the project requirement (inclusive of all expenses), including a full price breakdown for each stage of the project and details of the day rates that will apply for the lifetime of this project. Please note that the fixed price must include travel costs and reasonable expenses.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Name of consultant | Grade | Role | Day rate | Number of days | Total cost (ex VAT) | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  |   Please note that consultancy grades should align with the following definitions:   |  |  | | --- | --- | | **Grade** | **Requirement** | | Junior consultant | Demonstrable experience in a wide range of projects in their specialist field. Evidence of client facing experience and support services to wider consultancy projects. | | Consultant | Notable experience and in-depth knowledge of their specialist field. Evidence of a wide range of consultancy projects and client facing experience. Support work in process and organisational design and leading workshops and events. | | Senior Consultant | Substantial experience in their specialist field and in a consultancy/training role. Previous experience in project management and working in a wide range of high quality and relevant projects. Familiarity of the issues/problems facing public sector organisations. | | Principal Consultant | Substantial experience in their specialist field and in a consultancy/training role. Sound knowledge of the public sector and current policy and political issues affecting it. Previous experience in project management on at least three major projects, preferably in the public sector and using the PRINCE2 or equivalent method. | | Managing Consultant | Substantial experience in their specialist field and in a consultancy role. In depth knowledge of the public sector and of current policy and political issues affecting it. Previous experience in project management on at least 5 major projects, preferably in the public sector and using PRINCE2 or equivalent methods. | | Director / Partner | Extensive experience in their specialist field, in which they are nationally or internationally renowned as an expert. Extensive experience of leading or directing major, complex and business critical projects; bringing genuine strategic insight. In depth knowledge of the public sector and of current policy and political issues affecting it. |   **Marking Scheme**   |  |  | | --- | --- | | Score 0 | Unanswered or totally inadequate response to the requirement. Complete failure to grasp/reflect the core issues | | 1 | Minimal or poor response to meeting the requirement. Limited understanding, misses some aspects | | 3 | Good understanding and interpretation of requirements, providing clear evidence of how the criterion has been met | | 5 | Excellent response fully addressing the requirement and providing significant additional evidence of how the criterion has been met and how value would be added | |

**4. Procurement procedures**

Tendering Timetable

The timescales for the procurement process are as follows:

|  |  |
| --- | --- |
| **Element** | **Timescale** |
| Invitation to tender issued | Tuesday 27th February |
| Deadline for the submission of clarification questions | Friday 9th March @5pm |
| Deadline for submission of proposals | Tuesday 13th March @5pm |
| Shortlisted suppliers notified | Friday 16th March |
| Interviews and presentations if appropriate\* | w/c 19th March |
| Award contract | w/c 19th March |
| Project Inception Meeting | w/c 19th March |

\*Please ensure that the Project Manager and other key consultants who will be delivering this work are available to give presentations on the interview date

Tendering Instructions and Guidance

**Amendments to ITT document**

Any advice of a modification to the Invitation to Tender will be issued as soon as possible before the Tender submission date and shall be issued as an addendum to, and shall be deemed to constitute part of, the Invitation to Tender. If necessary, ORR shall revise the Tender Date in order to comply with this requirement.

**Clarifications & Queries**

Please note that, for audit purposes, any query in connection with the tender should be submitted via the ORR eTendering portal.The response, as well as the nature of the query, will be notified to all suppliers without disclosing the name of the Supplier who initiated the query.

**Submission Process**

Tenders must be uploaded to the ORR eTendering portal **no later** than the submission date and time shown above. Tenders uploaded after the closing date and time may not be accepted. Bidders have the facility to upload later versions of tenders until the closing date/time.

Please submit the Form of Tender and Disclaimer certificate along with your proposal. If you are already registered on our eTendering portal but have forgotten your login details, please contact the portal administrator.

An evaluation team will evaluate all tenders correctly submitted against the stated evaluation criteria.

By issuing this Invitation to Tender ORR does not undertake to accept the lowest tender, or part or all of any tender. No part of the tender submitted will be returned to the supplier

**Cost & Pricing Information**

Tender costs remain the responsibility of those tendering. This includes any costs or expenses incurred by the supplier in connection with the preparation or delivery or in the evaluation of the tender. All details of the tender, including prices and rates, are to remain valid for acceptance for a period of 90 days from the tender closing date.

Tender prices must be in Sterling.

Once the contract has been awarded, any additional costs incurred which are not reflected in the tender submission will not be accepted for payment.

**References**

References provided as part of the tender may be approached during the tender stage

**Contractual Information**

Following the evaluation of submitted tenders, in accordance with the evaluation criteria stated in this document, a contractor may be selected to perform the services and subsequently issued with an order.

Any contract awarded, as a result of this procurement will be placed with a prime contractor who will take full contractual responsibility for the performance of all obligations under the contract. Any sub-contractors you intend to use to fulfil any aspect of the services must be identified in the tender along with details of their relationship, responsibilities and proposed management arrangements.

The proposal should be submitted in the form of an unconditional offer that is capable of being accepted by the ORR without the need for further negotiation. Any contract arising from this procurement will be based upon ORR’s standard Terms & Conditions (see Form of Agreement attached). You should state in your proposal that you are willing to accept these Terms & Conditions.

The ORR does not expect to negotiate individual terms and expects to contract on the basis of those terms alone. If you do not agree to the Conditions of Contract then your tender may be deselected on that basis alone and not considered further.

The ORR may be prepared to consider non-fundamental changes to the standard terms and conditions in exceptional circumstances. If there are any areas where you feel you are not able to comply with the standard ORR terms and conditions, then details should be submitted as a separate annex to the proposal using the following format:

|  |  |  |  |
| --- | --- | --- | --- |
| ***Clause Number*** | ***Existing Wording*** | ***Proposed Wording*** | ***Rational for amendment*** |
|  |  |  |  |
|  |  |  |  |

Any services arising from this ITT will be carried out pursuant to the contract which comprises of:

* ORR Terms & Conditions;
* Service Schedules;
* this Invite to Tender & Statement of Requirement document; and
* the chosen supplier’s successful tender.

## ORR’s Transparency Obligations and the Freedom of Information Act 2000 (the Act)

The ORR is a central Government department and as such complies with the Government’s transparency agenda. As a result, there is a presumption that contract documentation will be made available to the public via electronic means. The ORR will work with the chosen supplier to establish if any information within the contract should be withheld and the reasons for withholding it from publication.

Typically the following information will be published:

* contract price and any incentivisation mechanisms
* performance metrics and management of them
* plans for management of underperformance and its financial impact
* governance arrangements including through supply chains where significant contract value rests with subcontractors
* resource plans
* service improvement plans

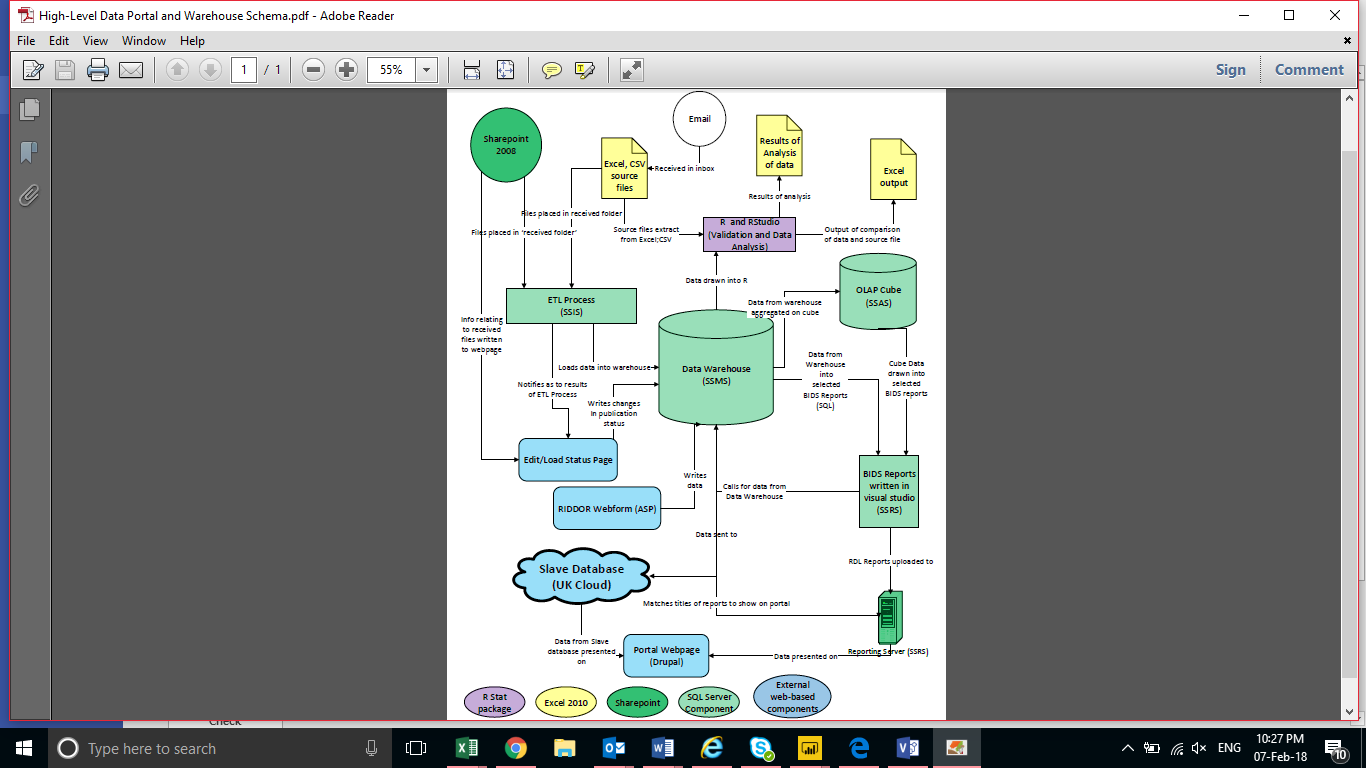
Where appropriate to do so information will be updated as required during the life of the contract so it remains current;

In addition, as a public authority, ORR is subject to the provisions of the Freedom of Information Act 2000. All information submitted to a public authority may need to be disclosed by the public authority in response to a request under the Act. ORR may also decide to include certain information in the publication scheme which it maintains under the Act. If a bidder considers that any of the information included in its proposal is commercially sensitive, it should identify it and explain (in broad terms) what harm may result from disclosure if a request is received and the time period applicable to that sensitivity. Bidders should be aware that even where they have indicated that information is commercially sensitive ORR may be required to disclose it under the Act if a request is received. Bidders should also note that the receipt of any material marked “confidential” or equivalent by the public authority should not be taken to mean that the public authority accepts any duty of confidence by virtue of that marking. If a request is received ORR may also be required to disclose details of unsuccessful bids

Please use the following matrix: to list such information:

|  |  |  |
| --- | --- | --- |
| Para. No. | Description | Applicable exemption under FOIA 2000 |
|  |  |  |
|  |  |  |
|  |  |  |

**Annex A: Current DW/Data Portal setup**



**Annex B: Statement of Requirement**

The functional and non-functional requirements were developed during a BI workshop using MoSCoW analysis.

* M - Must have this requirement to meet the business needs
* S - Should have this requirement if possible, but project success does not rely on it
* C - Could have this requirement if it does not affect anything else on the project
* W - Would like to have this requirement later though not necessarily at this stage.

**Functional**

1. **The portal will have a general search capability. Results will be ranked by:**
   1. Relevance to search criteria - M
   2. Category e.g. Static reports - M
   3. Interactive visualisation - M
   4. Dashboard - M
   5. How recently content was added/updated - S
   6. Data last refreshed as at automated - S
   7. Google style search – C
   8. Search using content i.e. Sales by Post Code – C
2. **The portal will provide intuitive navigation of content.** 
   1. Headings based on themes - M
   2. Links to related content – M
   3. Readable descriptions in plain English – M
   4. Sub menus – C
   5. Pop out boxes – S
3. **Portal will support the personalisation of the landing page** 
   1. Private data – M
   2. Only when logged in – M
   3. Saving report – S
   4. Favourites – S
   5. Recent used – S
   6. Colours – C
   7. Stop download option on non-ORR PCs - C
4. **The portal default landing page will show openly available content only – M**
5. **The portal will provide a ‘most viewed trends’, ‘other trends in viewing', e.g. recently added/updated**
   1. Trending at least 12 months - C
   2. Most/recently viewed – W
6. **The portal will support context sensitive callouts and popups to handle further information such as commentary, data quality and data limitations**
   1. Pop out text – C
   2. Definition – C
   3. Help txt - C
   4. Narratives – C

**Content**

1. **The portal will support the uploading/publishing of multiple document formats**
   1. PDF – M
   2. Excel – M
   3. ODS – M
   4. Word –M
   5. CSV – M
   6. Publish excel as a web service – S
2. **The portal will support the downloading of documents and data sets – M**
3. **The portal will support the downloading of specified subsets of data – M**
4. **The portal will allow the export of reports/data in a variety of formats (see 7.1 – 7.5)**
   1. Via Email - S
   2. Subscription all formats listed (7.1-7.5) – S
   3. Subscribe to a group of reports (i.e. receive one notification for all) – S
   4. Subscribe to be notified of changes in data (one email for all changes) – S
5. **The portal will provide the ability to add, update, manage and change content via configuration rather than coding or any other form of development work**
   1. Configuration – M
   2. HTML Custom code – M
   3. Ability to configure look and feel - M
6. **The portal will allow authorised users to configure look and feel - C**
7. **The portal will support subscription services e.g. subscribe to particular content**
   1. Subscription only available when registered – M
   2. Automatic notification on updates to subscribed content – W
8. **The portal will support the ability to create alerts for unexpected changes to tables**
   1. Registered users alerted to any changes - C
   2. Internal users can create their own business rules alerts – C
9. **The portal will provide report previews prior to running or downloading – M**
10. **The ability to use workflow – M**

**User Provisioning**

1. **The portal will provide the functionality to allow administration of users and groups by authorised administrators**
   1. Internal staff will have access to more information – M
   2. Ability to create new groups with distinct permissions/privileges – M
   3. Groups control access to content – M
2. **The portal will provide content to users without registration but provide an option to register for additional services, e.g. Newsletter, subscribe to reports, etc. - M**
3. **The portal will allow a variety of user types both internal and external for purposes of segmenting the content, managed through permissions and group rights e.g.**
   1. Internal – some may upload content, view pre-release, others not – M
   2. Industry – some may submit data, view pre-release, others not – M
   3. Public – view content and data only - M
4. **The portal will provide ‘Remember me’ functionality so that any configuration specific to the user will be provided at next log on - M**
5. **The portal will support single sign on for internal users (we believe this is via integration to Active Directory) – S**

**Reporting**

1. **The portal will support a variety of reporting types including,**
   1. Static reports –M
   2. Interactive parameterised reports (e.g. filters, date selection, drill down) – M
   3. Ad hoc reports – M
   4. Interactive Dashboards – M
   5. Visualisations – M
2. **The portal will support the ability to run reports directly against the Data Warehouse or cube, or both - M**
3. **The portal will support the ability to visualise data in a variety of graphical formats e.g. scatter grams, bar charts, etc.**
   1. Users able to download underlying chart data into various formats – M
   2. BI team able to create variety of charts (standard & customisable) – M
   3. BI team has the ability to restrict chart types available to users – M
4. **The portal will support the ability to visualise data using geo spatial technology** **- S**
5. **The portal will support SSRS reports – M**
6. **The portal will allow calculations to be performed on data in place – W**
7. **The portal will support download of data behind visualisations and other content - M**
   1. Watermarks – M
   2. Headers – M
   3. Footers – M
   4. Data/ time etc. - M
   5. Template pre-defined – M

**Data Entry**

1. **The portal will support data entry via web forms - M**
2. **The portal will provide the ability to update, change and manage the web forms via configuration rather than coding or any other form of development**
   1. Configuration – M
   2. Code - M
3. **The portal will allow field level validation to be applied to web forms - M**
4. **The portal will allow the maintenance of reference data within the web forms - S**
5. **The portal will allow data submitted via webform to either update the data warehouse directly or be subject to additional validation before submission** 
   1. Task based approval process - M
   2. Ability for users to upload data into a web form - M
   3. Copy form from previous period - S
   4. Alert that the form has been entered – M
   5. User can print off copy of the submitted form - S
6. **Integrate the Edit Load Status page into the data portal – M**

**Non-Functional**

**General**

1. The system should be subject to penetration testing in line with CESG recommendations – S
2. Users passwords should be configurable to expire globally – M
3. Users email and name should be store for logged on users – M
4. Passwords should lock out of 5 re tries – M
5. UI should be IE10 or above, Chrome compatible – M
6. Application should be mobile friendly on tablets, iPad , phones etc. – S
7. Excel download names should have a descriptive name – S
8. Login crediting should have a remember me facility – S
9. The system should allow user feedback – M
10. The application should be available in English – M
11. The application should be available in Welsh – S
12. The system must not store passwords in clear text. –M
13. The system must support delegated administration of business user roles and entitlements. – S
14. The system must be accreditable by DSU – C
15. The system must support content inspection and intrusion detection for all inbound communications. – C
16. The system must provide a protective monitoring regime consistent with Baseline/Enhanced Countermeasures (ISO27002:2005) and GPG13. – C
17. The system must enforce a role based access control (RBAC) regime consistent with HMG IS1, IS2, ISO27001 – C
18. All web page interactions must be capable of providing information for the purpose of web analytics. – M
19. The system must adhere to the HMG standards for Electronic Records Management, specifically the retention, review, archiving and destruction policies. – C
20. The system must generate and store audit data in accordance with BIP0008-1:2004. – C

1. https://www.mdstechnologies.co.uk/ [↑](#footnote-ref-1)
2. Reporting of Injuries, Diseases and Dangerous Occurrences http://www.legislation.gov.uk/uksi/2013/1471/contents/made [↑](#footnote-ref-2)
3. https://raildata.orr.gov.uk/riddor [↑](#footnote-ref-3)