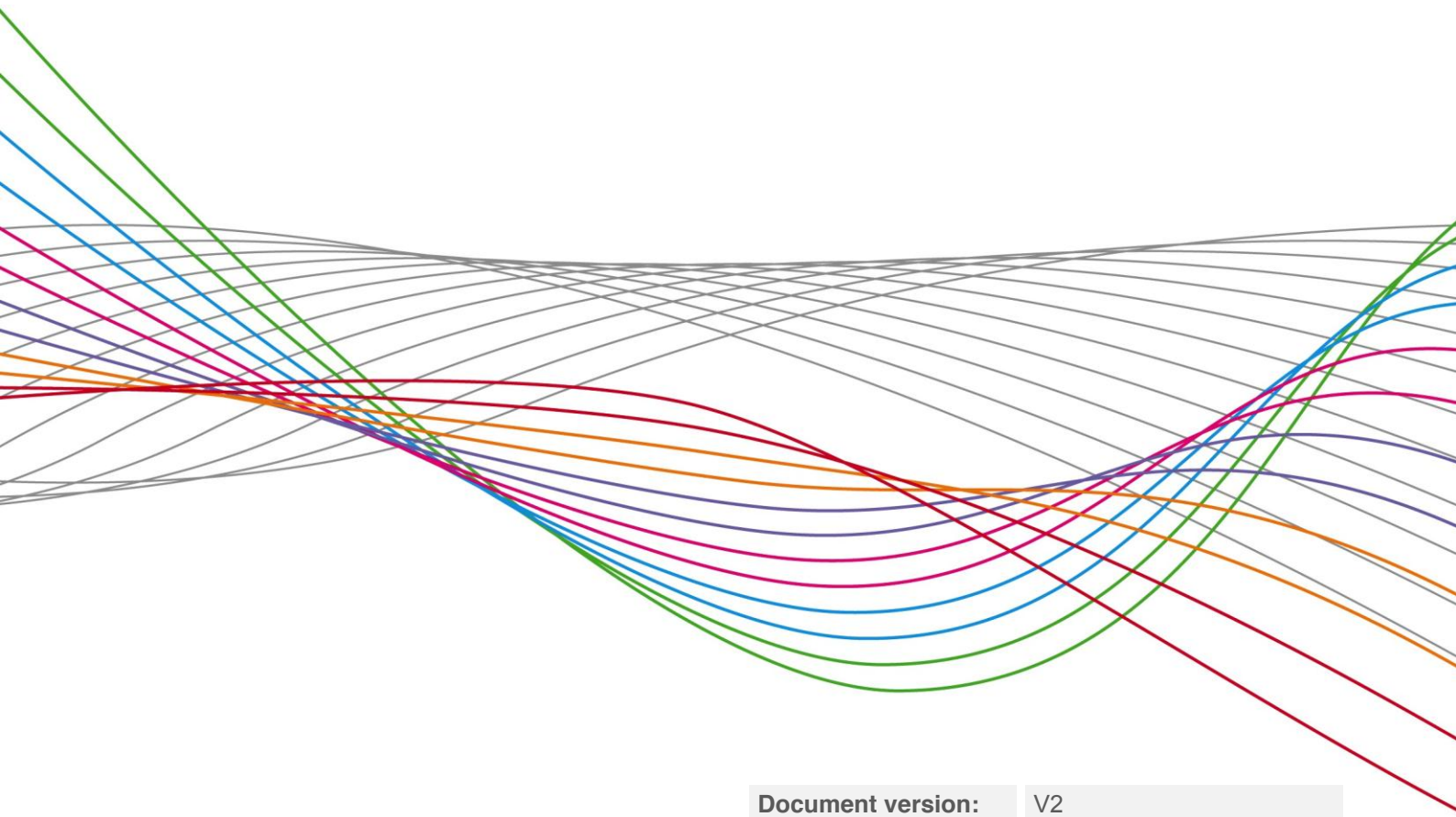
Assessment of Suppliers of Open Digital Services

Response Document

24 March 2014



Document version:	V2
Date:	24 March 2014
Author:	Jonathan Astin
Email:	Jonathan.astin@cds.co.uk
Telephone:	0113 399 4023

CDS Response

To aid the evaluation process, we have laid out our response to demonstrate our understanding of your requirements and how we will meet each of the certificate standards in relation to the publication of open data.

Understanding data-user needs

How would you go about understanding the needs of different types of data user to develop a solution that meets the needs of specialist and non-specialist users alike?

CDS adopts a user-centric approach by ensuring the needs of users are central to the development process. This involves gaining first-hand experience with users, talking to them and learning about their different information needs.

To understand the different information needs of specialist and non-specialist users, we will:

- Hold stakeholder interviews to learn about their perceptions, priorities, attitudes, behaviours, emotions and goals.

- Run UX workshops to gain a more in-depth understanding of information needs and how users will interact with the solution. During the development stage, workshops will also be used to test prototypes, gather user feedback and ensure that the solution meets user needs.

The stakeholder interviews and user workshops will be run by an experienced Business Analyst and UX Designer. The outputs will be used to inform the Requirements Analysis Document and scope of the solution.

Data processing

How would you take messy data from a variety of sources and in a variety of formats and import it into a backend system that can drive a website?

CDS would adopt a planned and multi-step process for taking messy data from a variety of sources and formats and importing into a backend system that can drive a website.

The starting point would be to design the data warehouse to reflect each different data source. We would then use custom developed scripts and ETL transforms to import each data source into the data warehouse. At this point, it would provide an opportunity to validate and clean the data, so that any duplicates are removed and that the data reflects the relational data structure. Once all the data has been imported into the data warehouse and the validation process has been completed, the data can be exported to a backend system that can be used to drive a website.

© CDS Digital

Data exploration

How would you create a useful and meaningful interface and/or visualisations so users can pose and answer simple questi**o**ns from the data?

To create a meaningful interface that will allow users to create their own queries and gain visual insight into data, CDS would propose to use a series of products and services in use by Government and private sector customers alike including:

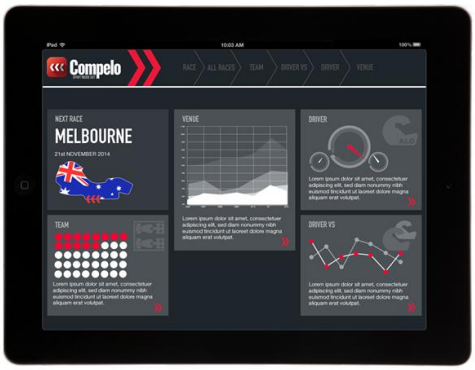
- Gartner magic quadrant leader Microstrategy
- Microsoft Reporting, Integration and Sharepoint Reporting services
- Logi Analytics dashboarding services
- Apple device reporting (CDS are Enterprise developers on Apple devices using the above products)

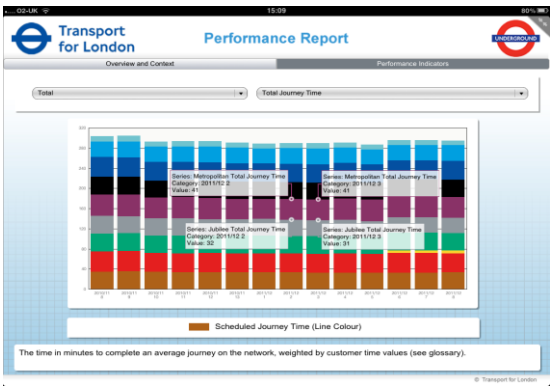
CDS offers services covering the entire life-cycle of data warehouse design, metadata, schema and fact table design, modelling and implementation.

As part of our user-centric approach, our UX team would engage with users at the start of the project to understand their information and reporting needs. This will ensure that the dashboard design and functionality is designed to exactly meet the user's needs and thereby provide a valid user experience.

CDS has a wealth of experience in creating dashboards that allow users to make better and more informed decisions. Clients include:

- Transport for London
- Compello
- ePIMS – government's mandated property and asset management system





© CDS Digital

Legal issues

What activities would you undertake to tackle the legal issues around data publishing, including licensing, intellectual property rights, derived data and privacy?

CDS has in-house legal expertise with capability to develop terms of use relating to the publishing, licencing, IPR, derivation and privacy of data. We would work with the data originators or owners to look at the provenance and attendant restrictions that relate to the data, and draw up a set of terms appropriate for its open publication. We would see this as a joint activity with the customer's legal representatives. Where possible we would re-use standard accepted terms to minimise the cost to the customer of developing new customised terms of use.

Practical issues

How would you ensure that the data is easy to find, and that any issues about its quality are documented?

CDS us a digital agency with a wealth of experience in developing accessible, easy to use websites, particularly for government organisations. Subject to the customer's preference, we would make the data available either via the customer's web service or provide a platform that the customer can provide a link to. CDS can provide all the services required to make the data available via the web, from design and technical implementation through to hosting. Users will be supported in finding the data through:

- Use of best practice coding standards ensuring a healthy organic search profile
- Registration of the data with the Open Data Institute with appropriate certification
- An appropriate search interface for the data itself (to be agreed with the customer), either using keyword or filter based search tools, or a more graphically-based business intelligence tools as outlined above.

Technical issues

How would you publish different types of data (reference data, raw data, aggregate statistical data) as open data in ways that meets a variety of different data users needs? What formats and open standards would you use? How would you approach creating persistent identifiers? What additional metadata, such as provenance metadata, would you provide?

The range and type of data to be published would be determined at the outset of the project. CDS would provide a business analyst to work with customer to develop use-case scenarios and create a requirement workbook. Subject to customer requirements we may also interview sample users as part of the analysis phase. This will establish:

- the target consumers of the data
- consumer's expectations of data types
- requirements for search and retrieval methods
- ongoing data maintenance requirements

© CDS Digital

Where required, we would provide provenance metadata either as part of the data set (if data is compiled from more than one source) or as supporting information for consumers.

Social issues

How would you support users of open data with relevant documentation, source code snippets, example queries and technical advice? How would you provide feedback routes to the publisher?

CDS would agree the level of document set required at the outset of the project. CDS has an in-house team of technical authors who provide technical documentation services together with our web developers and database administrators.

The provision of source code snippets will be determined as part of the analysis phase – for example if users need to share a particular view of the data or an extract. Where specified, CDS will build in an interface to generate the code snippets in the appropriate format into the delivery platform.

Queries and technical advice requests are normally routed initially to the customer, and, subject to an appropriate support agreement being in place, the customer will escalate queries where necessary to the CDS service desk. CDS operates an ITIL service desk, manned during office hours, with a 24hr ticket portal. All requests are tracked and our response measured against an agreed SLA (using ITIL standard guidelines).

Feedback routes would be subject to agreement with the customer, but could be email, feedback form, telephone, postal address, online forum or social media channel.

Team

What team would you put together to provide this service?

CDS would draw upon our team of 60 strong in-house permanent digital professionals that include all of the technical roles required for publication of open data to the standards required by ODI inclusive. This will include Business Analysts, UX Designers, Web Developers, Software Engineers, XML / Web Services Specialists, Database Administrators, Technical Authors, Testing Engineers, Service Desk Staff and qualified PRINCE2 Project Managers.

© CDS Digital