Consultancy and Support for

Telicent CORE Open-Source Enterprise Data Platform

Service Definition

G-Cloud 14 (RM1557.14) Lot 3 Support

Contents

1. Service Overview

1.1 Introduction

This document is a Service Definition for Consultancy and Support for Telicent CORE Open-Source Enterprise Data Platform offered by Telicent as Cloud Support through Lot 3 of the G-Cloud 14 Framework (RM1557.14).

Many CORE users are happy to simply download CORE from GitHub and get going. Others need advice and guidance to get started and keep improving. This G-Cloud offering is designed to help users design, build, operate and support CORE-based solutions on public, private or hybrid clouds. The services in this G-Cloud offering may be purchased individually or as a complete set, allowing users to mix and match to suit their needs.

Below, we provide more details of the CORE platform. The complete service portfolio, along with typical usage patterns, are summarised in Section 1.3, which additional detail in Sections 2, 3 and 4.

1.2 Context: The CORE Platform

CORE is an open-source secure data platform that implements data standards designed for interoperability in Government - the UK Information Exchange Standard (IES) ontology. CORE implements intelligence community standards for data labelling (IC-IHM/EDH) end-to-end and includes tooling for data ingestion and labelling. The fine-grain security model extends to data and meta-data storage and APIs that enforce data labels to selectively redact data on request.

CORE is free, open-source software, with optional support and closed source applications from Telicent. CORE can extract and standardise master and meta-data from your existing systems and feeds, unlocking the value in the data and enabling actionable insights at scale and in near-real-time. Your data can stay where it is while CORE acts as a semantic layer across your estate, or you can selectively migrate the data into CORE, facilitating the retirement of legacy systems and getting older data into shape for modern machine learning (ML) and artificial intelligence (AI) applications. Key features of CORE are:

- **Data engineering**: Data can be ingested through automation processes (batch) or in near-real time reaction to events in operational systems. The platform includes an extensive Python library that takes care of all the heavy lifting so your data engineers can focus on the business of labelling, cleaning, de-duping and converting the data. CORE can use any ontology you specify, but it ships ready to go with the IES 4D ontology that enables clear and unambiguous interpretation.
- **Data security:** Once data is ingested, cleansed and converted, it is stored in three indexes – a graph database, a search index, and a geospatial index. Our APIs work across all the data to provide an optimised intelligence picture. Each index stores the data labels alongside the data at a very fine-grain level. This can mean labelling, for example, individual relationships or text fields, so that only that data that needs to be protected is held back. CORE's label enforcement engine redacts only that data that the user is not allowed to see - it uses the 5EYES IC-IHM/EDH standard to label the data and compare those labels with, for example, user attributes or door-card entry systems. The Application Programming Interfaces (APIs) we expose only see the redacted data, and the platform takes care of all the access logs and data provenance so developers do not need to worry about anything other than building great applications.
- **Deploy anywhere**: CORE uses industry standard infrastructure technology and is deployed as a containerised system, so it can be installed on-premise or in the cloud. On modern cloud infrastructure with standard user authentication, CORE can be up and running with data ingested from multiple sources within a day. CORE supports the open telemetry specification, so infrastructure engineers get all the logging they need, streamed in a

standard format. The platform already implements a number of zero trust principles and more are being developed in line with UK Government requirements.

- **Deploy at speed**: The idea of CORE is that users get all the architecture they need in one box – event driven, ontology-aware, ABAC, open telemetry, standard APIs and zero trust. This allows you to focus on the real problems and get started quickly. To access CORE, simply download it from GitHub.

Figure 1 below shows the high-level CORE concept:

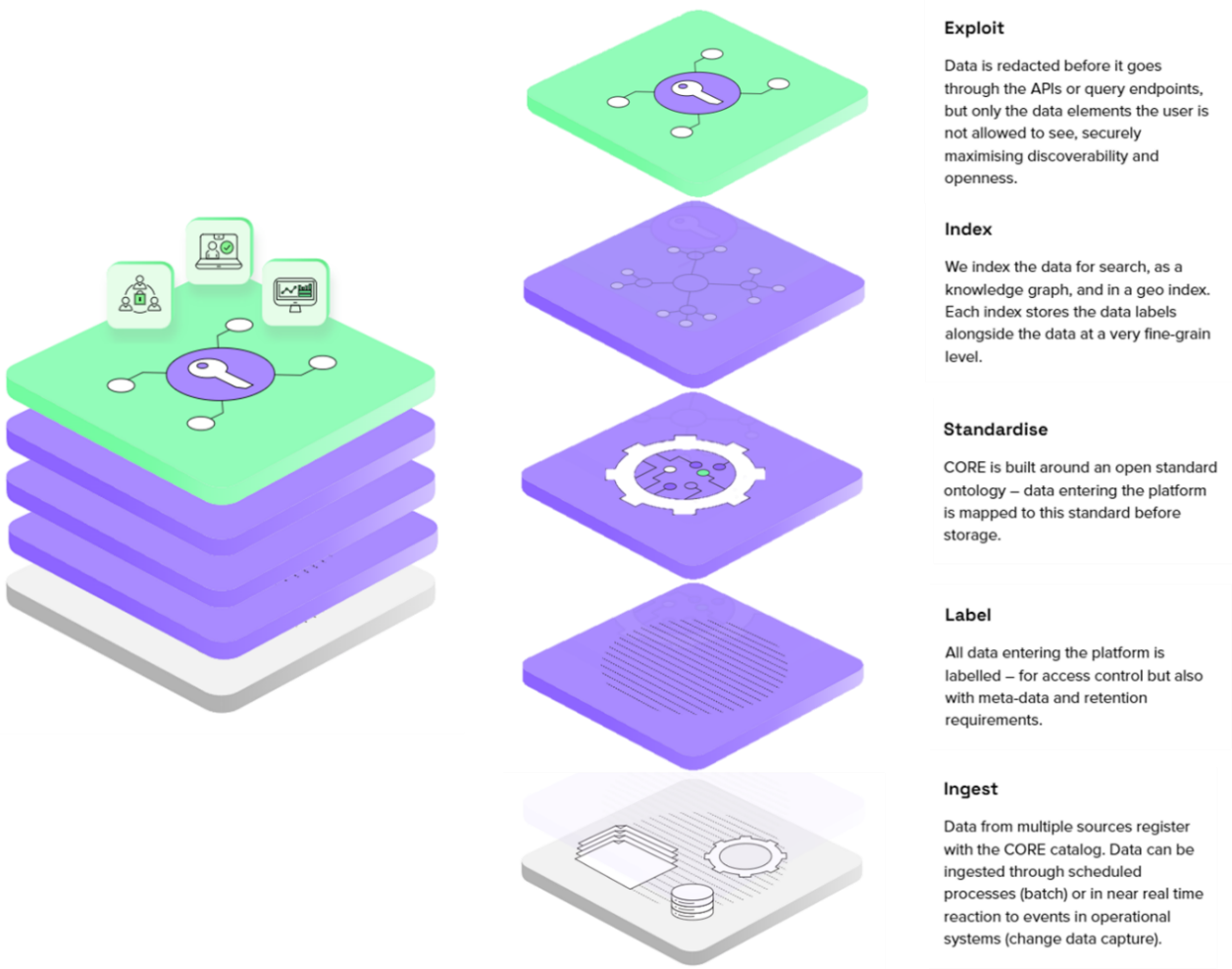

Figure 1: High-level concept of the Telicent CORE open-source enterprise data platform
Helping you to unlock the value in your data and enable actionable insights at scale and in near-real-time

1.3 Service Applicability

The services will support the following scenarios:

I want Telicent to:	Software	Packaged Service	Consultancy	Support
Give me advice on adopting CORE in my cloud	Please download CORE from GitHub		✓	
Help me create a CORE design for my cloud			✓	
Help me implement CORE on my cloud		✓	✓	
Help me migrate my CORE from on-premise to the cloud		✓	✓	
Help me migrate my existing capabilities to CORE in the cloud		✓	✓	
Manage my CORE platform				✓
Train me to use CORE			✓	

Figure 2: Services Matrix Providing CORE users with options to suit their CORE journey and capability

1.4 Contact Details

For all enquiries relating to this service, please email Gcloud@Telicent.io.

2. G-Cloud Service Streams

Telicent's services assist customers in the following G-Cloud streams:

- Cloud migration planning
- Setup and migration
- Training
- Ongoing support

This section describes our competence in each stream and lists the appropriate professional services.

2.1 Cloud Migration Planning

We have extensive experience in identifying and analysing organisational needs and helping organisations to understand options for adopting CORE in the cloud, including:

- Business analysis to understand and document business and user needs to ensure the suitability of CORE in your cloud-based approach.
- Assessing deployment scenarios including prototyping, development or production.
- Advising and guiding on appropriate cloud hosting options based on commodity cloud providers, typically Amazon Web Services and Microsoft Azure, or within private and hybrid cloud environments.

We provide services for defining strategy, architecture, and plans for adopting CORE in the cloud as well as targeted packaged services to help implement the solution. These services cover**:**

- Solution architecture and technical design of Telicent CORE-based cloud solutions:
    - Understanding operating environment and suitability for CORE.
    - Assessing deployment options and patterns and making recommendations.
    - Planning for capacity, throughput, and performance.
- Planning a roadmap for implementation of Telicent CORE in the cloud.

Our planning services are offered as a packaged service (see Section 3.1 CORE Cloud Readiness and Optimisation Review) or on a Time and Materials (see SFIA rate card) basis, tailored to your specific need.

2.2 Setup and Migration

Once a CORE cloud solution has been selected and/or designed we can provide consultancy to complete or assist in the deployment and setup of CORE. This helps you get started and quickly become productive with CORE on whichever cloud infrastructure you choose.

These services can be tailored to your needs and may include software installation, configuration and testing. We can also help migrate data, define ontology and data solutions, advise on integrating your existing services and applications with the CORE platform and train your staff.

Our Setup and Migration services are offered as a packaged service (see Section 3.2 CORE Dataset Ingest and Migration Review), or on a Time and Materials (see SFIA rate card) basis, tailored to your specific need.

2.3 Training

We provide a range of CORE training solutions. This training can be delivered virtually or onsite, to one or many delegates. For the range of courses available please contact us via the email in section 1.4.

Each training course can be delivered onsite or virtually with options for up to 12 delegates. One2One training workshops are also available. Fixed price packages cater for delivery options and number of candidates and are shown in the Pricing Document. Alternatively, we can create bespoke training tailored to your specific need on a Time and Materials basis (see SFIA rate card).

2.4. Ongoing Support

As on open-source product, Telicent's CORE software can be self-installed and managed by users free of charge within their own cloud environments. However, we recognise that you may require the assurance of having the product developer on hand to provide expertise, support and guidance.

To meet these requirements, Telicent provides a range of flexible CORE support functions that allow you to create a customised support service that is specific to your needs. The delivery elements of our CORE support function capability are described below.

2.4.1 Professional Services Team

The Professional Services Team provides subject matter expertise in all elements of the design, development, deployment, use and management of Telicent CORE in the cloud. They also provide a range of related services such as cloud architecture, data migration, data engineering, data security and ontology development.

As the originators of CORE, our team is uniquely placed to provide you with assistance and support to optimise delivering CORE in the cloud and ensure that you can make the most of your investment in the technology.

The professional services team is available on a Time and Materials basis (see SFIA rate card).

2.4.1 Technical Support

The Technical Support Team provides 2nd and 3rd line support both for Telicent CORE open source and Telicent proprietary products in the cloud.

Our CORE support is designed to be flexible and is broken down into components, which we have packaged into three service packaged – basic scale and enterprise. Your choice will depend on your cloud deployment scenario, service level required, and level of integration needed with your existing capabilities. Table 1 below shows the support components and Table 2 shows how these components are packaged for purchase though this G-Cloud offering.

Support components
Standard Remote Support via telephone and e**mail (provided 9:00-5:00 Monday to Friday)**
Dedicated Remote Support Portal and Service Manager (depending on package)
Agreed response time
Critical CORE software patches (requires Telicent access to client's cloud environment)
CORE Application software updates (requires Telicent access to client's cloud environment)
Non-critical software patching (requires Telicent access to client's cloud environment)

Table 1: CORE cloud support components

Support Level	Who is it for	CORE Application Support (Max Number of Users)	Support Type	Response Time	Minimum Commitment
Basic	Support for those who are comfortable running their own CORE who want the assurance of vendor expertise and support on hand, and basic additional support features	50	• Community support • Remote support	24 hrs	3 months
Scale	Support for those who are scaling their CORE use, and want greater vendor support and assurance, quicker response timescales with more support features	100	• Community support • Remote support • Dedicated helpdesk portal	12hrs	6 months
Enterprise	Support for those who are placing CORE at the centre of their enterprise and require rapid response, high-level vendor support and the complete set of support features	200	• Community support • Remote support • Dedicated helpdesk portal • Dedicated support manager	6 hrs	12 months

Table 2: CORE cloud support packages

Our CORE Cloud Support services can be used to support existing or new CORE cloud deployments. The prices for support are provided in the Pricing Document attached to this G-Cloud Service.

3. The Packaged Services in Detail

This section provides an overview of the packaged services. The exact profile of each service in relation to methods, resources and locations will be agreed at the point of call-off.

3.1. CORE Cloud Readiness and Optimisation Review

This service is suitable for any cloud project considering the use of, or already involving, Telicent CORE technology. An Telicent Technical consultant will conduct a design review of the planned or current use of CORE in your cloud environment, including:

- A high-level architecture review.
- Developing a deployment roadmap for new implementations.
- Recommendations for optimisations to existing implementations.

3.1.1. Business benefits

- Avoids cost on the project from reducing the technical risk at the design phase of a new project, or during a change to an existing implementation. It is significantly more expensive to re-work or re-design a solution once outside the design phase.
- Identifies avoidable and expensive customisation proposed in the project and reduces this cost by recommending best-practice integration methods for simplifying the solution.
- Reduces Total Cost of Ownership by having an insight into Telicent's technology roadmap. Telicent can help minimise expensive re-design of the solution in subsequent technology refreshes for the project.

3.1.2. Outcomes for the customer

- Technical risk of the project is assessed and mitigation strategies suggested in line with Telicent recommended best practices for CORE.
- Integration and Telicent CORE technical risks are minimised at design phase.
- Design assurance is provided which is independent from the main solution provider (where a third party is involved).

3.2. CORE Dataset Ingest and Migration Review

This service is suitable for any cloud project considering migrating or ingesting a dataset into a Cloud CORE Instance. An Telicent Technical consultant will conduct a review of your data and generate:

- Recommendations for pre-ingest data assurance activities
- Recommendations for implementing the appropriate data ingest pipeline using either the client's existing data engineering tooling, or the Telicent.Lib Ingest tooling that forms part CORE
- Recommendations for mapping ingested data to the chosen CORE ontology (Typically IES, but other ontologies can be used)

3.2.1. Business benefits

- Accelerates the ingest of data into CORE for exploitation.
- Identifies the optimum method for ingest, creating reusable patterns that will accelerate delivery of future datasets into CORE.

- Optimises conversion of the data into the chosen ontology, ensuring that structural and semantic rigour is observed.

3.2.2. Outcomes for the customer

- Risks in the ingest of the data will be identified so that mitigations can be put in place.
- A roadmap for migration of the dataset.
- An ontology mapping schema that allows the data to be confidently converted to the CORE ontology.

4. Service Provision and Usage

4.1 Pricing

Time and Materials pricing is provided in the SFIA Rate Card also attached to this G-Cloud service.

Pricing for consultancy and support services are described in the Pricing Document attached to this G-Cloud Service.

4.2 Terms and Conditions

Terms and Conditions for all services are detailed in the Terms and Conditions document attached to this G-Cloud Service.

4.3 Ordering and Invoicing Process

Please contact the Telicent sales team using the contact details in Section 1.4 to order these services.

4.4 On-Boarding and Off-Boarding

4.4.1 On-Boarding

To on-board our consultants to perform any of the services described in this document, we will follow a project initiation process.

4.4.2 Off-Boarding

At the end of each service delivery, we will complete a professional handover including any agreed knowledge transfer and documentation.

4.5 Training

Training services available from Telicent are described in Section 2.3.

4.6 Customer Responsibilities

Customer responsibilities will be agreed in the project initiation documents.

4.7 Service Constraints

There are no service constraints.

4.8 Technical Requirements

Any technical requirements will be project specific and agreed during project initiation.

4.9 Service Levels and Support

Not applicable to provision of consultancy services.

4.10 Service Management

Not applicable to provision of consultancy services.

4.11 Backup/Restore/Disaster Recovery

Not applicable to provision of consultancy services.

4.12 Termination Terms

Termination terms are covered in the separate Telicent Terms and Conditions Document attached to this G-Cloud service.

4.13 Financial Recompense Model

Not applicable to provision of consultancy services.

4.14 Data Restoration/Service Migration

Not applicable to provision of consultancy services.

4.15 Trial Service

Not applicable to provision of consultancy services.

4.16 Data Storage & Processing Locations

Not applicable to provision of consultancy services.

5. Our Experience

Telicent are the originators and developers of Telicent CORE, an open source, open standards data integration platform. CORE was built in response to the difficulties we saw in introducing capability and rapid innovation in Government departments and large enterprises. We designed it to give fast-moving innovators the capability they need to adapt to changing mission needs and demands, whilst giving the enterprise the assurance that these new capabilities are secured and standardised appropriately.

CORE is in use in a number of government departments, including the department for Business and Trade and the Ministry of Defence, and is designed with Government in mind. Our founders and many our staff have worked within government so understand the challenges that these environments present when integrating complex data or delivering new innovation capability. The services we offer within this services description are built from our understanding of the needs of this community.

Telicent staff have a deep understanding of open data standards, semantic/linked data and ontologies. They were part of the team responsible for driving the technical delivery of the HMG Information Exchange Standard v4 (IES4), and continue to be a key part of the community that is delivering IES5.