



Colibri
Digital

G-CLOUD 15 SERVICE DEFINITION
AWS LAKEHOUSE DATA PLATFORM
IMPLEMENTATION

Contents

1. Service Overview	3
2. Features & Benefits	4
3. Technical Requirements & Implementation	4
4. Security & Quality Assurance	5
6. Constraints	5
7. Onboarding & Offboarding	6
Onboarding	6
Offboarding & Exit	6
Data Portability	6
Knowledge Handover	6

1. Service Overview

Supplier Name	GCI NETWORK SOLUTIONS LIMITED
Service Branding	Colibri Digital
Framework	G-Cloud 15 (RM1557.15)
Service Type	Lot 3: Cloud Support

Colibri Digital's AWS Lakehouse Data Platform Implementation delivers an AWS-native lakehouse-style data platform designed for enterprise-scale analytics and AI. By combining the flexibility and cost-effectiveness of an Amazon S3-based data lake with the performance and structure of a traditional data warehouse, we create a unified architecture directly within your AWS environment.

Our service focuses on rapid deployment and best-practice configuration, designed to support agreed security controls, be governed, and ready to deliver actionable insights. We integrate native AWS services—such as Amazon S3, AWS Glue, and Amazon Redshift—to create a scalable ecosystem that removes data silos and reduces the total cost of ownership.

NOTE: This Service Definition covers design and build activities only. Ongoing operational support and service levels are out of scope for this offering.

Key technical components of the delivery include:

Storage & Ingestion	Expert setup of Amazon S3 "Medallion Architecture" (Bronze/Silver/Gold) and automated ingestion using AWS Glue or Amazon Kinesis
Data Governance	Implementation of AWS Lake Formation for centralised fine-grained access control, auditing, and data lineage.
Lakehouse Processing	Design and build of processing patterns using Amazon EMR, AWS Glue, or Amazon Redshift Spectrum to support batch and streaming workloads
Infrastructure as Code (IaC)	Full platform automation using Terraform or AWS CDK, ensuring immutable and repeatable deployments that reduce "configuration drift".
Security & Identity	Designed to support public sector security requirements, subject to buyer assurance/accreditation and agreed controls.
Operational Monitoring	Implementation of Amazon CloudWatch and AWS Config integration for real-time performance tracking, cost monitoring, and compliance.

Core Public Sector use cases would include:

Centralised Citizen Data Records	Consolidating disparate data sources into a single "Golden Record" while maintaining strict governance through Lake Formation
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Predictive Policy Modelling	Enabling data scientists to run machine learning models on a unified AWS platform to forecast the impact of policy changes.
Automated Regulatory Reporting	Modernising legacy reporting cycles through automated serverless pipelines, reducing manual effort and human error.
Secure Inter-Departmental Sharing	Facilitating the secure exchange of data between departments using governed, audited AWS Data Exchange or Lake Formation shares.
Real-Time Service Monitoring	Providing live dashboards for public service performance, leveraging streaming ingestion and Amazon Athena.

2. Features & Benefits

The following table outlines the core technical features of the implementation and the specific value outcomes they provide to public sector organisations.

Technical Features	Benefits
Unified Data Architecture	Strategic Clarity: Supports data engineering, BI, and ML on a single, consistent platform for maximum ROI.
Infrastructure as Code (IaC)	Consistency & Speed: Uses Terraform to ensure environments are repeatable, version-controlled, and free from manual drift.
Centralised Governance	Secure-by-Design: Uses AWS Lake Formation to ensure compliance with GDPR and NCSC principles through fine-grained access.
Medallion Data Templates	Operational Excellence: Provides reusable templates, allowing teams to focus on delivering citizen-facing insights.
Comprehensive Documentation	Streamlined Accreditation: Built-in security controls and runbooks simplify the process for Senior Information Risk Owners (SIROs).

3. Technical Requirements & Implementation

The implementation is delivered in line with the GDS Service Standard, applying an iterative four-phase model:

The service is delivered by SC-cleared consultants, if required, using a hybrid model of remote and on-site support.

Discovery	Analysis of existing AWS data architecture, technical debt, and sovereignty requirements to define success criteria.
Alpha	Validation of the proposed Lakehouse solution through a Proof of Concept in a sandboxed AWS environment.
Beta	Non-critical data workloads with limited live traffic to confirm operational readiness.
Live	Full production deployment, integration with live monitoring.

4. Security & Quality Assurance

As an AWS Premier Partner with the Government Consulting Competency, Colibri Digital ensures all implementations meet the highest security standards.

Secure Development:	All project staff are SC-cleared (or clearable) consultants who can be provided, subject to availability and buyer requirements.
Data Handling	Data handling and residency requirements are agreed with the buyer and implemented through the selected AWS region and agreed controls.
Standards	Our delivery workflows are to meet rigorous government and industry security benchmarks.

5. Support & Service Levels

This Service Definition covers design and build activities only. Ongoing operational support and service levels are out of scope for this offering.

6. Constraints

The following constraints apply to the AWS Lakehouse Data Platform Implementation:

Professional Services Scope	This is a Lot 3 Cloud Support offering; it does not include ongoing AWS consumption costs or third-party licences
Data Source Accessibility	The feasibility of automated ingestion is dependent on the availability and connectivity of legacy data systems.

7. Onboarding & Offboarding

Onboarding

Buyers are onboarded via a formal kick-off Meeting typically within five working days of a Call-Off Contract.

Offboarding & Exit

At completion, we hand over agreed deliverables and confirm secure return/deletion of buyer-provided data in line with agreed handling procedures.

Data Portability

All documentation is provided in open formats (PDF).

Knowledge Handover

All documentation, runbooks, and templates are handed over in open formats (PDF) to ensure operational independence.