Cloud Migration Service

Service Definition Document

Sopra Steria

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1.1 Overview

About Sopra Steria

Sopra Steria, a major Tech player in Europe with 50,000 employees in nearly 30 countries, is recognised for its consulting, digital services and solutions. It helps its clients drive their digital transformation and obtain tangible and sustainable benefits. The Group provides end-to-end solutions to make large companies and organisations more competitive by combining in-depth knowledge of a wide range of business sectors and innovative technologies with a collaborative approach. Sopra Steria places people at the heart of everything it does and is committed to putting digital to work for its clients in order to build a positive future for all. In 2024, the Group generated revenues of €5.8 billion.

The world is how we shape it

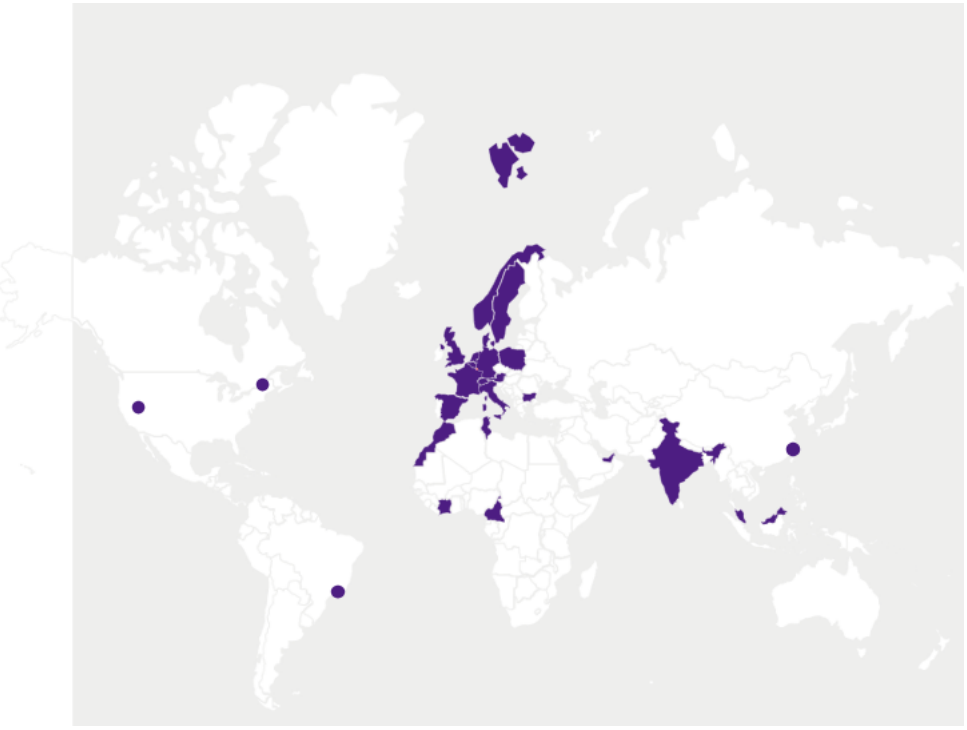
Sopra Steria (SOP) is listed on Euronext Paris (Compartment A) – ISIN: FR0000050809 For more information, visit us at www.soprasteria.com

50,000
employees

€5.8bn
2024 revenue

Top 5
European digital services companies

In nearly
30
countries



1.2 Our Cloud Capability

Sopra Steria Cloud Practice brings together leading digital, cloud and engineering expertise to accelerate transformation for our clients.

- Delivering comprehensive digital and cloud transformation, including strategic consulting, change management, large-scale migration, application modernisation, next-generation development and secure, optimised operations
- Integrating deep capability across applications, data, infrastructure, cloud platforms and security, supported by industrialised assets to enable solutions across Private, Public, Hybrid and Sovereign Cloud environments
- Using an end-to-end cloud delivery model that integrates business, engineering, security and operations, ensuring continuous innovation, strong governance, and measurable business value throughout the full cloud lifecycle.

1.3 Our Credentials

Capacity

More than 15,000 cloud experts in 30 countries (Vision, Ops, Design, Scale)

Market recognitions

- **Large account** (best category>$250m) **in the "Public Sector Industry Cloud Landscape"** (Forrester)
- **Leader "Cloud public in Europe" & " Next Gen Private & Hybrid Cloud"** (ISG)
- **Leader "Cloud Infra Brokerage"** (NelsonHall)
- **Best in Class "Azure" & "SAP" & "Service Now"** (PAC Radar)
- **Leader "Cloud Native Application" & "Application Transformation Services"** (Quadrant)
- **Major Contender "Cloud Services" & "Cloud Native Applications" & "Services on AWS Azure & CGP"** (Everest)

Key partners

NumSpot, Google Cloud, Oracle Cloud, IBM Cloud, Scaleway, vmware, aws, Microsoft Azure, Visa, OVHcloud, redhat, OUTSCALE

Main market recognitions

2nd in IT Services in France and 10th in EMEA*

Cybersecurity	Digital	AI	IT for Green	Cloud
• **Leader "Cyber resiliency services"** (NelsonHall) • **Leader "cybersecurity" in France & Germany** (ISG) • **Top 5 "cybersecurity" in France** (Markess)	• **Leader "Application Transformation Services"** (Quadrant) • **Leader "Digital Banking"** (NelsonHall) • **Leader "Digital Banking Services"** (ISG) • **Major Contender "Digital twin Services"** (Everest) • **Innovator "Digital Manufacturing"** (NelsonHall)	• **Leader AI Services & Gen AI** (PAC Innovation Radar) • **Leader AI Services** (Quadrant) • **Leader "Intelligence Process Automation"** (Quadrant) • **Major player "European Professional Services for Data-Drive"** (IDC) • **Major contenders "AI services" & "Intelligent Process Automation services"** (Everest)	• **Leader "ESG for Banking Services"** (NelsonHall) • **Best in class "consulting and digital services for sustainable development"** (PAC Innovation Radar) • **Major Contender "NetZero Consulting Services"** (Everest)	• **Large account (best category>$250m) in the "Public Sector Industry Cloud Landscape"** (Forrester) • **Leader "Cloud Infra Brokerage"** (NelsonHall) • **Best in Class "Azure" & "SAP" & "Service Now"** (PAC Radar) • **Leader "Cloud Native Application" & "Application Transformation Services"** (Quadrant) • **Leader "Cloud public in Europe" & " Next Gen Private & Hybrid Cloud"** (ISG) • **Major Contender "Cloud Services" &"Cloud Native Applications" & "Services on AWS Azure & CGP"** (Everest)

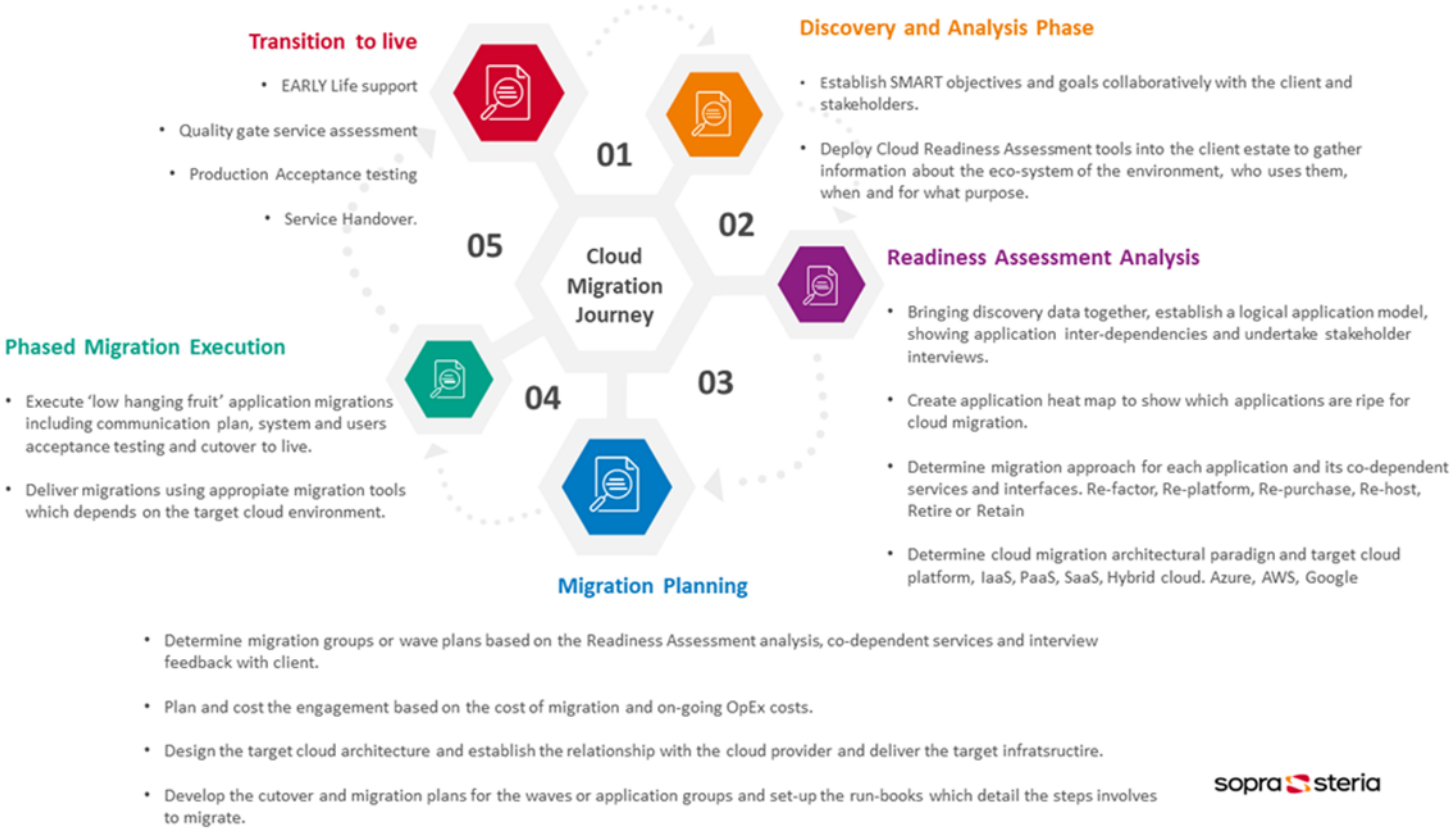
PAC, IDC, ISG, Quadrant, Everest Group PEAK MATRIX, NelsonHall, FORRESTER, exægis

* Source PAC 2024

2 Service Overview

2.1 Service Description

Sopra Steria offers an agnostic Cloud Migration service, which builds onto the Cloud Readiness Assessment service. The service guides the customer in moving applications, data, and processes to the cloud, ensuring a smooth and efficient transition. This will enable customers to diminish or remove the complexities of on-premises systems, to deliver enhanced scalability, flexibility, and cost-effectiveness. Depending on customer needs and requirements, Cloud provider native migration tools can be used to execute the migration and examples for both AWS and Azure are discussed in section 2.4



2.2 Features

Cloud migration is a complex process that involves careful planning and execution to ensure a smooth transition from on-premises environments to cloud platforms like AWS or Azure. Below is a simplified overview of the typical steps and stages involved in a cloud migration:

- **Assessment and Planning** - Current State Analysis: Understand the existing on-premises environment, applications, and data. This is achieved through our Cloud Readiness Service.
- **Risk Assessment** - Identify potential risks and challenges associated with the migration
- **Customer Engagement** - Perform detailed Stakeholder Interviews by facilitating workshops to capture streamlined answers to questions and to plan for cut-over and planned outages where necessary. Develop a communication plan to keep everyone informed, and develop a detailed cutover and migration plan, highlighting the discrete steps to migration and who does what when.
- **Migration Planning** - Perform the Move Group or Wave Planning so that co-dependent applications or systems move together to reduce 'back or temporary' integration activity whilst the migration is in flight. Report on the Transition Wave Plan and capture contact details and project communications.

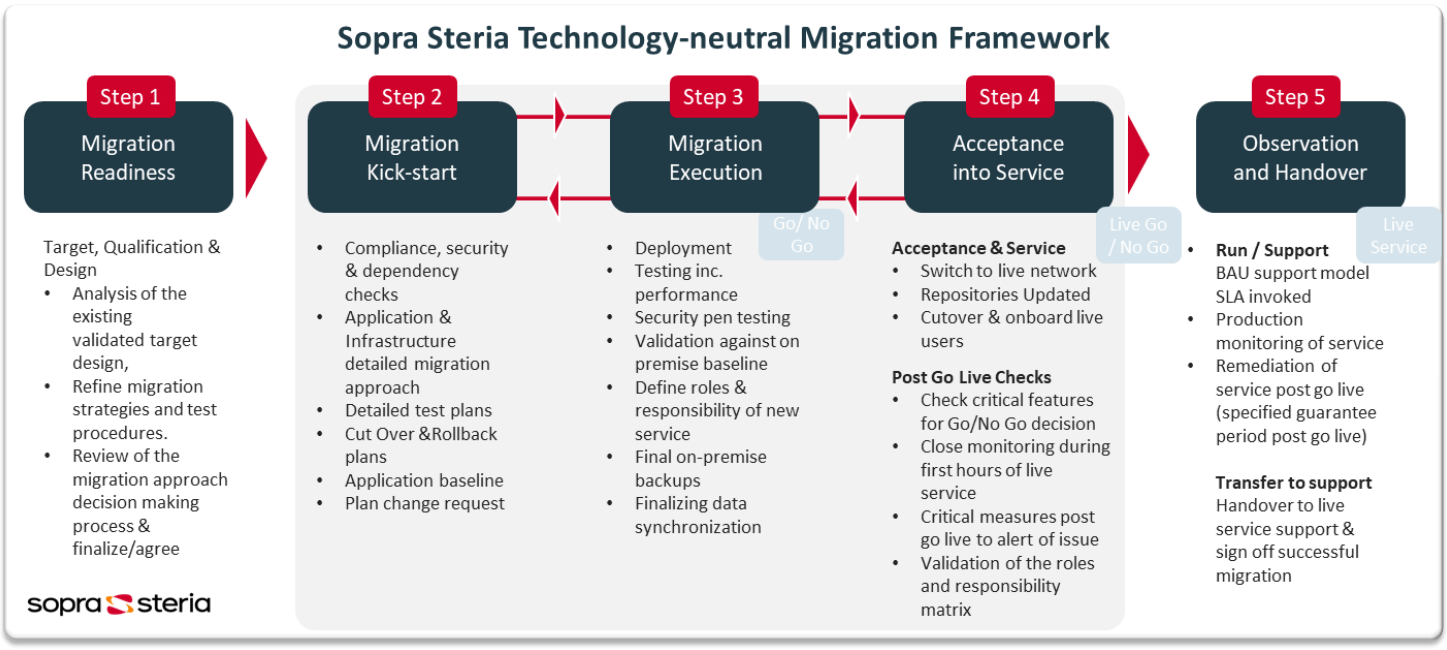
- **Choose the Cloud Platform** – If not already established, evaluate cloud service providers (e.g. AWS, Azure) based on factors like cost, services and geographic presence. Results from the Cloud Readiness assessment help customers select the platform that best aligns with the organisation's needs and goals.
- **Design the Cloud Architecture** - Develop a detailed architecture for the cloud environment, considering scalability, security, network, and performance. Define networking, storage, and compute requirements
- **Data Migration** - Analyse and categorise data for migration, distinguishing between critical and non-critical data. Choose an appropriate data migration strategy (e.g., lift and shift, re-platform, re-factor) based on business needs.
- **Application Migration** - Categorise applications based on complexity and criticality. Select a migration approach for each application, such as re-hosting, re-platforming, or re-architecting.
- **Testing** - Conduct thorough testing of migrated applications and data to ensure functionality and performance meet expectations. Implement testing strategies, including user acceptance testing (UAT) and performance testing.
- **Deployment and Migration Execution** - Gradually move applications and data based on the Wave/grouping analysis to the cloud environment. Monitor closely during the deployment phase to identify and address any issues promptly.
- **Optimisation** - Fine-tune the cloud environment for optimal performance and cost-effectiveness. Implement auto-scaling and monitoring solutions to adapt to changing demands.
- **Training and Documentation** - Provide training to IT staff and end-users on using the new cloud environment. Document processes, configurations, and best practices.
- **Post-Migration Support -** Offer ongoing support to address any post-migration issues. Monitor and optimise the cloud environment based on real-world usage and performance.

2.3 Benefits

- **Cost Savings -** Migrating to Cloud offers a 'pay as you' go service and reduces hardware expenses, lower maintenance costs, and pay-as-you-go pricing models. Reducing the TCO by reducing OpEx and removing CapEx expenditure.
- **Improved Scalability -** Allows the customer service to flex and easily scale up or down based on demand such as during seasonal peaks or sudden growth
- **Enhanced Performance -** Improved performance through features like load balancing, increased processing power, and high-speed data access in the cloud
- **Security and Compliance -** Robust security measures such as encryption, identity management, and compliance certifications. Addresses specific industry regulations and compliance requirements, ensuring a secure and compliant migration.
- **Faster Time to Market -** Cloud migration accelerates the time to market for new products or services by reducing deployment times and streamlining development processes
- **Business Continuity –** Delivers disaster recovery and business continuity benefits of cloud migration, showcasing how data redundancy and backup solutions minimise the risk of data loss
- **Innovation and Agility -** Cloud enables innovation by providing access to a vast array of cutting-edge services and technologies and fosters agility and the ability to quickly adapt to changing business needs

2.4 Our Approach

In terms of Approach, we offer a 5-stage framework which is illustrated below. Step 1 for example is part of our Cloud Readiness Assessment offering which is described in a separate document. It essentially involves the deployment of assessment tooling into the current source estate and garners a view of what the art of the possible is, in terms of technology and cost. Depending on the technologies involved, we would then, after agreement that a migration into cloud is viable, we would then utilise Cloud Vendor native tools to execute the migration. The process is fully managed, tested, accepted, and handed over into BAU operation.



For migration into AWS Cloud, the following services can be used depending on the customer source environment:

- AWS Server Migration Service (SMS):
  - SMS enables automated migration of on-premises virtual machines to the AWS Cloud
  - It supports VMware vSphere and Microsoft Hyper-V environments
  - SMS simplifies the migration process by replicating on-premises server volumes to AWS and automatically converting them into Amazon Elastic Block Store (EBS) volumes
- AWS Database Migration Service (DMS):
  - DMS facilitates the migration of databases to AWS, supporting various source and target database engines
  - It supports homogeneous migrations (e.g., Oracle to Oracle) as well as heterogeneous migrations (e.g., Oracle to Amazon Aurora)
  - DMS allows for both one-time migrations and continuous data replication, with minimal downtime and data loss
- AWS Snow Family:
  - The AWS Snow Family offers physical devices (Snowball) for offline data transfer to AWS
  - Customers can use Snowball devices to securely transfer large volumes of data from on-premises environments to AWS, bypassing the internet and minimizing transfer times
  - Snowmobile is a large-capacity data transfer device designed for exabyte-scale data migrations
- AWS DataSync:
  - DataSync is a data transfer service that simplifies and accelerates data transfers between on-premises storage systems and AWS
  - It automates data movement tasks, such as initial data ingestion, incremental updates, and data synchronisation
  - DataSync optimises data transfer performance and minimises latency by utilizing AWS Direct Connect or VPN connections
- AWS Transfer Family:
  - The AWS Transfer Family offers fully managed file transfer services for migrating file-based

workloads to AWS

- AWS Transfer for SFTP allows customers to migrate SFTP (Secure File Transfer Protocol) workloads to AWS, providing seamless integration with existing authentication systems and workflows
- AWS Transfer for FTPS enables the migration of FTPS (FTP over TLS) workloads to AWS, ensuring secure data transfer over encrypted channels

From an Azure perspective, Azure provides a range of cloud migration tools designed to facilitate the migration of on-premises workloads and data to the Azure Cloud. Some of the key Azure migration tools include:

- Azure Migrate:
  - Azure Migrate is a central hub for assessing and migrating on-premises workloads to Azure. It provides discovery and assessment capabilities to evaluate on-premises environments, assess workload suitability for migration, and estimate costs
  - Azure Migrate offers various migration methods, including agentless and agent-based assessments, as well as support for VMware and Hyper-V environments
- Azure Site Recovery (ASR):
  - Azure Site Recovery is a disaster recovery and migration service that enables replication of on-premises virtual machines to Azure
  - It supports heterogeneous replication, allowing customers to replicate VMware, Hyper-V, and physical servers to Azure
  - ASR provides automated failover and failback capabilities, ensuring business continuity and minimizing downtime during migration
- Azure Database Migration Service:
  - Azure Database Migration Service simplifies the migration of on-premises databases to Azure SQL Database or Azure SQL Managed Instance
  - It supports various source database engines, including SQL Server, MySQL, PostgreSQL, Oracle, and MongoDB
  - The service automates schema and data migration tasks, with minimal downtime and data loss
- Azure Data Box:
  - Azure Data Box offers offline data transfer solutions for migrating large volumes of data to Azure
  - Customers can use Azure Data Box devices to securely transfer data from on-premises environments to Azure, bypassing the internet and minimizing transfer times
  - Azure Data Box provides options for both online (Data Box Edge) and offline (Data Box Disk, Data Box Heavy) data transfer scenarios
- Azure Data Migration Assistant (DMA):
  - Azure Data Migration Assistant helps assess on-premises databases for compatibility issues and provides recommendations for migrating to Azure
  - It assesses databases for feature parity, performance, and security considerations, guiding customers through the migration process.

2.5 Inputs

We would expect the following inputs from you as part of this service:

After completing a Cloud Readiness Assessment, which is documented in a separate SDD, for an on-premises to cloud migration, the key inputs required to execute the migration to the cloud include:

- **Migration Strategy:** Based on the assessment findings, a clear migration strategy needs to be defined. This strategy outlines the approach for migrating workloads, applications grouping and wave planning so

that groups of co-dependent application and services can be migrated together, and data to the cloud, including re-hosting (lift and shift), re-platforming, re-architecting, or adopting a hybrid approach.

- **Resource Allocation:** Identify and allocate the necessary resources for the migration project, including personnel, budget, and infrastructure resources such as cloud instances, storage, and networking configurations
- **Technical Architecture Design:** Develop a detailed target cloud architecture design that aligns with the chosen migration strategy. This includes defining cloud resources, networking configurations, security protocols, and any necessary adjustments to optimise performance and scalability.
- **Data Migration Plan:** Develop a data migration plan outlining how data will be transferred from on-premises systems to the cloud. Considerations include minimizing downtime, ensuring data integrity and implementing efficient transfer methods.
- **Application Migration Plan:** Create a migration plan for each application identified in the assessment, specifying the migration approach, sequence, dependencies, and any required modifications or updates to ensure compatibility with the cloud environment. It should be noted that the Application Modernisation SDD can be consulted which can then follow up on making any IaaS services Cloud Native. (Day 2).
- **Security and Compliance Measures:** Implement security controls and compliance measures identified during the assessment to ensure the security and compliance of data and applications in the cloud environment. This may include configuring access controls, encryption, and compliance monitoring.
- **Testing and Validation:** Conduct thorough testing and validation of migrated workloads and applications in the cloud environment to ensure functionality, performance, and reliability. This may involve testing for compatibility, performance benchmarks, and user acceptance testing. Please see the Testing Service SDD.
- **Change Management Plan:** Develop a change management plan to manage organisational changes and stakeholder communications throughout the migration process. This includes providing training and support for end-users and stakeholders affected by the migration.

This is a high-level list and is not exhaustive. If you cannot provide all of these inputs, then we can discuss altering our approach to accommodate your situation.

2.6 Outputs & Deliverables

Some of the outputs and deliverables generated from the service are identified below:

After the migration has been successfully executed, the supplier should provide the customer with key outputs and deliverables to ensure a smooth transition and ongoing support. These deliverables may include:

- **A successfully migrated Cloud Service and ongoing service support:** Ultimately this is the key deliverable, but it is underpinned by the following deliverables
- **Migration Completion Report:** A comprehensive report detailing the successful completion of the migration project. This report should include an overview of the migration process, milestones achieved, and any challenges encountered and resolved during the migration.
- **Post-Migration Assessment:** An assessment of the migrated environment to validate that all in-scope data, infrastructure, databases, and applications have been successfully migrated to the cloud. This assessment should verify data integrity, application functionality, and performance benchmarks.
- **Documentation:** Comprehensive documentation detailing the migrated environment, including configurations, network diagrams, security settings, and any customisations or modifications made during the migration process. This documentation serves as a reference for ongoing management and troubleshooting.
- **Training Materials:** Training materials and resources to help end-users and stakeholders familiarise themselves with the new cloud environment. This may include user guides, tutorials, and training sessions to ensure a smooth transition and maximise productivity.
- **Support and Maintenance Plan:** A support and maintenance plan outlining the supplier's responsibilities for ongoing support, maintenance, and monitoring of the cloud environment. This plan should specify service level agreements (SLAs), escalation procedures, and contact information for support requests.
- **Optimisation Recommendations:** Recommendations for optimizing the cloud environment to improve

performance, efficiency, and cost-effectiveness. This may include suggestions for rightsizing resources, implementing cost-saving measures, and optimizing configurations based on usage patterns and best practices.

- **Security and Compliance Documentation:** Documentation outlining security controls, compliance measures, and regulatory requirements implemented in the cloud environment. This may include compliance reports, audit logs, and documentation of security policies and procedures.
- **Feedback and Review Session:** A feedback and review session with the customer to gather feedback on the migration process, address any remaining concerns or issues, and identify opportunities for improvement. This session provides an opportunity to ensure customer satisfaction and identify areas for future collaboration.

This is a high-level list and is not exhaustive.

2.7 Certifications & Skills

Some of our certifications and skills related to this service are identified below:

- Cloud Architecture
- Cloud Solution Engineering
- Application Development
- DevSecOps

This is a high-level list and is not exhaustive.

3 Pricing

Please refer to the Pricing Document for this Service.

4 Next Steps

4.1 Contact

Please contact us if you would like to know more about any of our listings on G-Cloud.

Email: sector-support@soprasteria.com

As all of our G-Cloud enquiries initially come into a single contact, please remember to tell us:

- Your name, your organisation name and contact details
- Which service you are enquiring about
- A brief summary of your requirements or problem statements that you would like support to address.

4.2 More Information

More information about our services and capabilities can be found on our website here.