



Scottish Government
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Scottish Procurement

Cloud Services Framework

(Framework Reference: SP-18-027)

Hints and Tips

1. Hints and tips for the cloud services framework operation.

This document has been developed in conjunction with the [Buyer's Guide](#) for the Cloud Services Framework. It is intended to assist the Scottish Public Sector when procuring Cloud Services for their organisation by providing key considerations for buyers and technical experts.

The information contained within is not exhaustive however we have drawn out the key pieces of information you may need when preparing tender and specification documentation.

2. Scope of the framework agreement

This framework agreement is for the provision of cloud services, including private cloud, public cloud, community cloud and co-location services as defined in the framework agreement definitions. For ease of reference and to ensure all round clarity, Scottish Procurement has provided [definitions of cloud services](#) based on the US National Institute of Standards and Technology (NIST).

The framework agreement is available for use by all Scottish public and third sector bodies.

3. Good Practice checklist

A good practice checklist, to assist buyers when sourcing a requirement through the framework, is available at Annex A of the [Buyers Guide](#).

4. Drafting your specification? Need help understanding what questions to ask contractors?

The following provides some key considerations and [Annex A](#) provides questions you may wish to consider when drafting your specification or when testing the market.

- Consider holding an open day or conference call with all contractors to discuss your organisational requirements at the earliest opportunity,
- Consider consulting the [Cloud First programme](#) to help develop your scope or just to consider options. The role of the Cloud First programme is to encourage and support public sector bodies towards using cloud services and realise the benefits of cloud computing.
- Cloud Transition Services – our framework offers a cloud consultancy element if you require a review of your current infrastructure and services. The report is independent and can be used to host a mini competition with all contractors on the framework
- Sustainability - please review the Energy Efficiency responses from contractors in the [Knowledge Hub](#). Consider possible financial savings as well as your carbon footprint e.g if you are wishing to move to a contractor's datacentre
- All contractors have ISO 27001 and ISO 27017 compliance or equivalent
- Review the original framework agreements to ensure your requirement aligns with existing policy

5. Scottish Procurement point of contact

Tom Waring

Senior Portfolio Specialist | Scottish Procurement

Scottish Government, Victoria Quay, Edinburgh, EH6 6QQ

Phone: 0131 244 5485

Email: tom.waring@gov.scot

Key questions you may wish to consider when drafting your specification or when testing the market
Location
Please confirm the location of your key datacentres from which services will be delivered. <i>NB: Consider if remote management of applications is an option</i>
Commercial/Billing
Are we able to scale usage both up and down with each service you are offering and will this change be reflected in increased/decreased billing?
How do you charge for your services? Please explain the charging model for each individual service that is being proposed, including charging units, ability to scale/flex and billing period
Connectivity
How are your network services delivered?
What the typical lead time when customers order connectivity services such as IP transit, managed LAN ports and cross connect ports?
Environment & Sustainability
What is your annualised Power Usage Efficiency (PUE) figure and how is this calculated?
How does your cooling system operate? Is direct or indirect free air cooling used?
Where do you source your power from?
What % of energy consumed is renewable?
Do you have any plans to further mitigate the environmental impact of your data centre services?
Reporting
Do you have a customer portal and what functionality does it offer?
Does your portal enable capacity planning? (if yes, how is this delivered?)
Does your portal offer asset management (if yes, how is this delivered?)
How granular is power consumption reporting? Can reports be automatically be generated on power usage at a device level?
Resilience
Which components of the datacentre facility are both concurrently maintainable and fault tolerant? Please detail all key components and show which offer resilience (i.e. N+1 or N+2)
What impact would concurrent maintenance have on the fault tolerance of the datacentre and the availability of services?
Risk Management
What are the highest risk natural disasters for the area, and what steps are taken to mitigate their impact?
Security
Can you guarantee data sovereignty within Scottish borders for our data?

Is your data centre housed in a physically separate building?
Do you have external perimeter fencing and if so, is this of a single or double layer?
Describe the secure access controls to the actual data centre?
Describe the physical security measures designed to prevent intruder access to the data centre
Do you have full 24x7 manned security in place?
Do you have active surveillance cameras
Do you have two factor authentication in place to control access to corridors, data halls, Pods and individual racks?
How is access granted to the data centre? What forms of ID are required?
Do you host any shared equipment in your customer data halls?
Service Levels
How does your SLA work and how is availability calculated?
Do you offer service credits and how are these calculated?
Please explain the availability SLA for each service you are offering, including how this is measured and at what level (i.e. application, operating system, platform etc.)
Please explain your approach to service credits, how are they calculated and when would they apply?
Licensing
Do you provide licenses as part of your service?
Can we utilise our own licenses as part of the hosting agreement?
Project Management
Do you offer project management services?
Certification
Do you have ISO certification and if so, when does it expire?
How often are you audited for ISO certification and when does it renew?
Are you able to provide SWAN connectivity?
What other Certifications do you hold and what are they?
Cloud Service
Can you provide Hyperscale cloud services?
Can you provide hybrid cloud services?
Data Centre
What happens if we need to use more than our allocated power? Can we burst above the allocated amount? Can you reduce the committed amount? What is the physical maximum kilowatts that can be made available in a rack?
What level of resilient connectivity is available when connecting services to the data centre
Is your data centre certified by the uptime institute? If yes, to what tier and is this for design and build or just design?

When does this certification expire?
What quality/industry certifications has the datacentre earned, and do you undergo annual audits to maintain them?
Do you provide caged areas or just rack space in your data centre?
Power & Cooling
What are the average and maximum power densities of the facility on a watts per cabinet basis?
How is additional power consumption charged?
How resilient is the power feed (i.e. switchgear, UPS and generators) to each rack?
How often are your power generators load tested?
How often do you conduct full "black tests" for your power generators (where the data centre runs from generator power alone)
IaaS
How is your IaaS charged and what does this include?
What level of service management is included as standard? Does this include management up to the operating system or the hypervisor only?
How flexible is the consumption of resources? Can we increase and decrease consumption on-demand and will our charges reduce if our usage decreases?
Storage
What tiers of storage are available and how is usage measured (is it used, raw, total provisioned etc.)?
Do you offer storage performance guarantees? If yes, what is available and how is performance calculated?
Backup & DR services
How is your backup and recovery service charged?
Does the unit price for backup and disaster recovery remain constant throughout the contract term?
What level of ransomware protection is offered?
What happens if our backup requirement decreases?
How do you charge for long term data retention?
Is it possible to conduct a mass restore from backup?
Does the DR service include the recovery compute resource pool?
What level of automation is possible for DR/business continuity?