**Provider 1:**

Requirements

* Must be able to warehouse or host the GEPF data in a SQL database.
* Must be equipped with appropriate security features to ensure the integrity and protection of GEPF’s investment data.
* Appropriate information security functionalities include:
* Must ensure the confidentiality, integrity and availability of information during processing, at rest and during transmission.

Questions

* Which flavour of SQL databases are being used? SQL . (SQL)
* Should all communication, even internal to intranet communication, be encrypted? ( only external must be encrypted)
* Should the database be encrypted?( no )
* Is HTTPS-SSL an accepted encryption methodology for data transport? (Yes)
* Is there a data transport security encryption preference? ( we prefer the transport to be 2048 encrypted)
* Will data be sent/received over the internet, and if so what are the communication protocols of such interfaces? Especially with regards to security? (Yes , via Sftp, Webservice)

Requirements

* Must provide audit logs recording critical employee activities, exceptions and information security events.

Questions

* What type of events need to be audited? (Not limited to this : logon , log off, failed login, data accessed , deleted , modified etc)
* What are examples of critical employee activities? ( Super Administrator’s and administrators)
* What are examples of information security events?( when someone is attempting to copy the database or update the tables without proper authority, run a query it Mr attempts to run query)

Requirements

* Monitor, measure, and report on service availability and optimize system performance.

Questions

* Is Quintessence required to have utilities to report on uptime of services when the services are hosted by the GEPF? (No but the solution must have capabilities/ to optimize its performance when required)
* Is the GEPFs’ IT infrastructure capable of performing the function of monitoring the machines and environments if an On-Prem solution is provided? These include but not limited to Disaster Recovery, Operating System updates and the like.( Yes )

Requirements

* Ability to load and retrieve data from the GEPF SQL server;

Questions

* Are there encryption protocols? ( there must be encrypted between the end user devices and browsers)

**Provider 2**

* What do they mean by “**investment performance monitoring**”? Is it the monitoring and managing of the investment data being generated or are they looking to calculate the actual investment performance itself?

Calculate the investment performance data.

* “**Must have built in calculation tools (standard investment calculations) and functions that are easy to integrate with excel and other reporting tools through an add-in for investment performance”**
	+ What do they view as standard investment calculations?

Investment performance, attribution, contribution and risk calculations

* + What system is currently being used to calculate performance?

We are currently using an external service provider. We are not looking to replace the service provider. This investment performance monitoring function will be done internally, alongside the external service provider.

* Are they looking to replace it as part of this RFP or are they looking for a tool which can consolidate information from the incumbent systems for data management and reporting purposes?

We are looking for a tool that can extract data from various information sources and perform investment performance calculations**.**

**Must have built in investment risk tools (standard investment risk tools) and functions that are easy to customise.**

The system must be able to perform standard investment risk calculations such as sharpe ratio, etc. We are currently using an external service provider to perform our investment risk calculations. This investment performance monitoring function will be done internally, alongside the external service provider.

* + What do they view as standard investment risk tools?
	+ What system is currently being used to calculate risk?
	+ Are they looking to replace it as part of this RFP or are they looking for a tool which can consolidate information from the incumbent systems for data management and reporting purposes?

**Provider 3**

* What is meant by “team dedicated to the GEPF”? Is there an expectation for our team members to work exclusively on the GEPF’s project?

The GEPF does not require team members to work exclusively on the GEPF project. The expectation is that the GEPF should be able to get hold of their dedicated team should they require assistance.

Investment Monitoring Functionality

* Who is responsible for the completeness, accuracy and cleanliness of the data – GEPF or us?

GEPF

**Provider 4**

# Project requirements:

1. Do you have a date by which you must be live

Yes.

1. What are the drivers for this date

The project will be based on project timelines.

1. Do you have an anticipated roll out plan

Yes.

1. Have you anticipated the resource demands on your team

Yes.

1. Will the implementation be managed by an internal or external project manager

Internal.

1. Have you anticipated project control and reporting governance

Yes.

# Business complexity:

1. How many portfolios and benchmarks do you wish to load into the system

Approximately 80 portfolios.

1. What calculations are required:

All the calculations mentioned below will be required:

* 1. Performance (portfolio level)
		1. TWR
		2. MWR
		3. IRR
		4. Gross/Net returns
		5. Different flavours of net and gross
		6. Other – Please specify
	2. Contribution
		1. Security level contribution and returns
	3. Attribution
		1. Equity type models (e.g. Brinson)
		2. Fixed Income type models (e.g. factor based)
	4. Which types of risk calculations are required at portfolio level
		1. Value at Risk
		2. Tracking Error
		3. Sharpe Ratio
		4. Beta
		5. Drawdown
		6. Other – Please Specify
1. How is the business structured in terms of portfolio aggregation, please describe the different levels e.g.

The investment performance reporting team has four people. Two analysts, one manager and the executive head.

* 1. Top level – GEPF
	2. Level 1 – by department e.g. Internally managed, Externally Managed)
	3. Level 2 – by asset type/dept (e.g. Equity, Fixed, Derivatives, Cash)
	4. Level 3 – by sector type (e.g. county/industry)
1. How many portfolios at the lowest (bottom) level of the hierarchy

Approximately 61 portfolios.

1. At which levels are benchmarks associated with the portfolio aggregation structure

At composite level.

1. Is GIPS composite functionality a requirement, and if so how do you manage composite memberships?

Yes, our composites are calculated according to GIPS.

1. Please expand on how many individual users will need access to the overall solution as well their roles.

Two users

# Data:

**Holdings/transactions**

1. Describe the existing/expected data flows and sources

The data flow will be coming from the global custodian.

1. Is a MS SQL database the preferred RDBMS

Yes

1. Is the preferred deployment option On Premise

Yes

**Asset classes/Instruments**

1. Are all the securities from the portfolios and the benchmarks located in a single source?

No, the securities from the portfolios and the benchmarks are not located from a single source.

* 1. Portfolio and Index securities
	2. Cash instruments
	3. Derivatives
	4. Do you have swap instruments? If yes, can you provide two legs?
	5. List the instrument types and approximate number in each type which you currently administer as well as possible expansion.
1. What type of private assets are held (e.g. Private Equity, Real Estate, Infrastructure)

Private Equity, real estate and infrastructure

**Benchmarks**

1. Is there a requirement for sub-benchmarks to be carved-out from the main benchmark, or will all benchmarks be provided by the benchmark providers

No carve – outs will be required.

**Classification structures**

1. What are the main classification structures that are required to support the differing investment processes that will be required for analysis and reporting

Listed and unlisted investments.

# History:

1. How many years history is to be loaded for performance (portfolio) at the different levels in the portfolio aggregation structure

Approximately 10 years.

# Operations:

1. Describe key challenges in terms of data validation and controls that you need the system to solve.

The solution must provide data validation capabilities to ensure the integrity of the information and data quality.

1. Describe key challenges through the operational landscape that you need the system to solve.

Please refer to the RFP.

1. What are your system performance requirements at a high level

Please refer to RFP.

1. How many different classification structures do you manage in your current system

The system must be able to report an all asset classes.

1. What is the average number of calculations that need to be run per portfolio

The system will have to able to perform performance, contribution, attribution and risk calculations.

1. Please provide the number of users who will require access to the system. Are there different classes of user (e.g. Full access / read only / view reported output only)

Two users

# Workflow:

1. What is the ideal workflow for the extract, transform, load of the data from the different sources.

Please refer to RFP for the ETL process.

1. What is the ideal workflow to check and validate the business data before running calculations

Software solution provider to provide guidance.

1. What is the ideal workflow for running calculations, checking outlier results and approving results.
2. Software solution provider to provide guidance.
3. Back-Dated data

Back-dated trades are processed and recorded by the global custodian.

* 1. What is the strategy for back-dated trades
	2. Is there any locking management in the upstream provider’s systems

# Data Extraction:

1. Describe the expected data extraction mechanisms required

Please refer to the RFP for information.

* 1. Excel
	2. Web Services API
	3. Portal
	4. Reports
	5. Extract to downstream systems
	6. Other

# Reporting:

1. If regular production or ad-hoc reports are required, please describe type and frequency

The reports will be on a monthly and ad-hoc basis

1. How many data sources will feed the reporting system?

One source.