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# Gas Enquiry Service (GES) Service Definition

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**Technical Specification Document**

**Gas Enquiry Service (GES) Service Definition**

Version: 1.2

Effective Date: 24 February 2023

*Change History*

<b>Version Number</b>	<b>Implementation Date</b>	<b>Reason for Change</b>
0.1	TBD	Initial Draft for November 2019 Technical Specification Approach consultation
0.2	TBD	Draft for Spring 2021 Switching Consultation
1.0	18 July 2022	Switching SCR Modification R0041
1.1	4 November 2022	R0036
1.2	24 February 2023	R0052

## 1 Description of [Gas Enquiry Service](#)

- 1.1. The [Gas Enquiry Service \(GES\)](#) allows [GES Users](#) to access gas market data where they are entitled to do so in accordance with the [Data Access Matrix](#) defined within the [Data Access Schedule](#). Data is sourced from either the [Gas Central Data Service](#) or the [Central Switching Service \(CSS\)](#). The [GES](#) is the only means by which [GES Users](#) can access information relating to [Supply Meter Points](#) that are not part of their portfolio and can also be used by [GES Users](#) to access information relating to [Supply Meter Points](#) that are part of their portfolio. Some [GES Users](#) have rights to access portfolio data through other industry arrangements.
- 1.2. The [GES Provider](#) is not a [Party](#) under this [Code](#). Where the [GES Provider](#) is referenced within this [Code](#), [RECCo](#) is obliged to ensure that the services are provided in line with this [Code](#).
- 1.3. The [GES](#) consists of:
  - (a) an online portal to view data for all [Supply Meter Points](#) excluding [Twinstream Meter Points](#), [Shared Supply Meter Points](#) and [Gas Interconnectors](#);
  - (b) an Application Programming Interface (API) service which allows [GES Users](#) to gather information from the service as detailed in the [Data Specification](#);
  - (c) a reporting function enabling defined data sets to be provided to individual [GES Users](#).
- 1.4. The [GES](#) is a tool for viewing and accessing information sourced from [Data Items](#) already held in industry systems and does not prescribe any further validation of those [Data Items](#).
- 1.5. The [GES Provider](#) takes no responsibility for the accuracy of data other than ensuring that it reflects the data received, in accordance with the [Data Specification](#). Identified inaccuracies should be notified to the relevant [Data Master](#) identified within the [Data Specification](#) and corrected at source via standard industry processes.
- 1.6. This [Service Definition](#) should be read in conjunction with:
  - (a) the [Data Access Schedule](#) which defines the governance rules relating to data access via the [GES](#); and
  - (b) the [Data Specification](#) (including the [Data Access Matrix](#)) which defines the [Data Items](#) accessible to each category of [GES User](#), the means by which data is made available to users and the content of API messages and relevant reports.
- 1.7. The [GES Provider](#) shall produce and maintain a user guide which will assist [GES](#)

[Users](#) to access the service and articulates the functionality of the service to [GES Users](#).

1.8. The following generic rules apply to the access of data across both the online portal and the API service, as further explained in the [Data Access Schedule](#):

(a) data shall be available to [GES Users](#) as defined in the [Data Access Matrix](#). This is defined based on the [GES User Category](#), and in some instances, whether or not they are [Registered](#) or [Appointed](#) for the [Supply Meter Point](#). For example, additional data may only be available to the current [Registered Supplier](#), as defined in the [Data Access Matrix](#);

(b) data item history will be accessible where specified in the [Data Access Matrix](#). For example, the [GES](#) online service will show asset history to [GES Users](#) entitled to this data; and

(c) unless specifically conducting a search for the [Retail Energy Location Address](#), the address details provided via a search will be the [Meter Point Location Address](#). [GES Users](#) shall only access the [Retail Energy Location Address](#) for the purpose of switching.

1.9. The [GES Provider](#) is one of a number of [Switching Data Service Providers](#), and is therefore captured within the scope of the overall [Switching Service Management](#) arrangements, as defined in the [Switching Service Management Schedule](#). The scope of the [Switching Service Management](#) arrangements is limited to the primary interface between the [GES Provider](#) (or its contracted [CSS Interface Provider](#)) and the [CSS Provider](#).

## 2 Definition of [GES Users](#)

2.1. In this [Service Definition](#), the term "[GES User](#)" refers to the organisation granted access to data in accordance with the [Data Access Schedule](#); and the term "[Authorised Person](#)" refers to the individual representative of an [GES User](#) accessing the [GES](#) on behalf of the [GES User](#).

2.2. The [GES](#) provides access to data to [GES Users](#), in accordance with the process specified in the [Data Access Schedule](#). The [Data Items](#) that each [Authorised Person](#) can access, and any conditions of access relating to specific [Data Items](#), are defined by the access afforded to the [GES User](#) on behalf of which that [Authorised Person](#) is acting. The [GES User](#) access is set out in the [Data Access Matrix](#) which forms part of the [Data Specification](#).

2.3. In addition, the [GES](#) interfaces with the following services:

(a) data is provided by the [CDSP](#) via a logical interface; and

(b) data is provided by the [CSS Provider](#) to the [GES](#) via [CSS](#) APIs.

### 3 Service Functionality

#### Online Portal

- 3.1. The online portal is an interface designed to give [Authorised Persons](#) access to data. It is not to be used to support automatic extraction capability e.g. harvesting bots or scraping. [GES Users](#) must engage with the [GES Provider](#) where large scale data access is required.
- 3.2. In accordance with the [GES](#) user guide, online portal users can search for data relating to a specific [Supply Meter Point](#) using one or more of the following:
  - (a) [Meter Point Reference Number](#);
  - (b) [Meter Point Location Address](#);
  - (c) [Retail Energy Location Address](#); or
  - (d) [Meter Serial Number](#).
- 3.3. Search results are provided where the search information matches the data associated with one or more [Supply Meter Points](#) within the [GES](#). Where search information does not result in a match, the [GES](#) will return a message showing that no data was found. In limited circumstances, the [Authorised Person](#) may be advised by a system prompt to contact the [GES Provider](#) for details. The screens accessible to an [Authorised Person](#), and the data populated therein, are specific to each [GES User Category](#).

#### API Service

- 3.4. The API service is an interface designed to give machine-to-machine access to data.
- 3.5. An API service user can search for data relating to a specific [Supply Meter Point](#) based on the data defined in the [Data Specification](#).
- 3.6. The available web service methods and the [Data Items](#) returned are detailed in the [GES API Technical Specification](#).
- 3.7. [GES Users](#) will be required to select a usage level, with an annual lookup limit linked to a service charge. [GES Users](#) can change usage levels prospectively. If a [GES User](#) exceeds its usage level a default charge may be applied.

### 4 System Access and [GES User](#) Management

- 4.1. Once a new [GES User](#) has been [Qualified](#) as a [GES User](#) in accordance with the [Data Access Schedule](#) and [Qualification and Maintenance Schedule](#), the [Code Manager](#) will inform the [GES Provider](#) who will provide access within five [Working Days](#) to the online portal and / or the API service (as specified by the [Code Manager](#)).
- 4.2. In order to access the online portal and API service, [GES Users](#) must employ transport layer security v1.2 or higher.

### Online Portal

- 4.3. Each [Authorised Person](#) shall have an individual user account, which shall only be accessed via entry of the correct user credentials. Access to the online service is provided via the UK Link Portal. In order to access the online portal, [Authorised Persons](#) must use a compatible browser at a satisfactorily supported version. Compatible browsers and relevant supported versions are specified in the [Gas Enquiry Service](#) user guide.
- 4.4. The [GES Provider](#) shall create for specified [GES Users](#), a single 'Master Admin User' ([MAU](#)). For some [GES User Categories](#) the [GES Provider](#) can perform the role of [MAU](#) for the [GES User](#).
- 4.5. The MAU shall have the ability to:
  - (a) create more [Authorised Persons](#) and grant them privileges associated with other [Authorised Persons](#) e.g. allowing them to reset passwords, enable and disable accounts and create new [Authorised Persons](#);
  - (b) search for [Authorised Persons](#);
  - (c) arrange the resetting of credentials, disabling, re-enabling, deleting or reinstating accounts, and controlling the functionality to which [Authorised Persons](#) have access. Deleted accounts will not be visible to [Authorised Persons](#) or user-run reports; however, they will continue to be recorded by the [GES](#) for audit purposes.

### API Service

- 4.6. To enable [GES Users](#) of the API service to authenticate themselves with the service, the request for all web service methods must contain a service subscription licence key provided by the [GES Provider](#) to determine:
  - (a) the web service methods that are available to the [GES User](#);
  - (b) the request limits of the web service and web service methods for the [GES User](#);

- (c) the response limits of the web service and web service methods for the [GES User](#); and
  - (d) the [Data Items](#) that are available to the [GES User](#).
- 4.7. The API service can be accessed via endpoints detailed in the [GES API Technical Specification](#).

## 5 [User Limits](#)

### Online Portal Access

- 5.1. The online portal is intended to be accessed by individual [Authorised Persons](#). It has not been designed for interaction with systems / automated data extraction (such as harvesting bots or scraping). Where the [GES Provider](#) identifies that a [GES User](#) or [Authorised Person](#)s account is accessing data in this manner this will be discussed with the [Code Manager](#). The [GES Provider](#) may be instructed to suspend such accounts if necessary while these investigations are conducted by the [Code Manager](#).

### API Access

- 5.2. [GES Users](#) need to specify expected usage volumes with the [Code Manager](#), and access to the [GES](#) API will be granted on this basis.
- 5.3. Each [GES User](#) may exceed its expected usage volume determined by the service plan associated with the subscription licence key. The [GES](#) will not constrain a [GES User](#) from doing so. Where a [GES User](#) exceeds the service plan message volume, any additional requests will be charged in accordance with the [REC Charging Statement](#).
- 5.4. The API service counts all requests made to each accessible web service method, per calendar month, for each [GES User](#).

## 6 [Service Availability](#)

- 6.1. The [GES](#) online portal and API services shall be provided 24hrs a day, seven days a week, except during [Scheduled Maintenance](#) periods and unplanned outages.
- 6.2. The [GES](#) online portal and API services shall have 99.75% availability for each calendar month (excluding [Scheduled Maintenance](#)).
- 6.3. Any unplanned outage of the services shall be notified by the [GES Provider](#) to:
- (a) the [Code Manager](#) as soon as is practicable. Such notification shall also include an estimate for the restoration of services, with further confirmation provided



when services are restored.

(b) the [Switching Operator](#), in accordance with the [Switching Service Management Schedule](#).

6.4. In the event of an unplanned outage, the [System](#) shall resume operation within one hour.

6.5. During the service outage, online portal and API requests will not be fulfilled i.e. the [GES User](#) will not be able to access the online portal and specific requests will not be responded to during the outage. If an [Authorised Person](#) tries to access the API service when the service is not available, the [Authorised Person](#) will be notified that the service is not available. Any such API requests will not be counted towards a [GES User](#)'s usage volume.

6.6. [Scheduled Maintenance](#) shall not occur between 16:00 and 01:00 hours. In the event of [Scheduled Maintenance](#) that impacts the service that the [GES Provider](#) is providing under this [Code](#),

(a) the [GES Provider](#) shall notify the [Code Manager](#) with a minimum 10 [Working Days](#)' notice of [Scheduled Maintenance](#). The [Code Manager](#) will notify [GES Users](#) as soon as reasonably practicable.

(b) the [GES Provider](#) shall provide notice to the [Switching Operator](#) for inclusion in the forward schedule of change, in accordance with the [Switching Service Management Schedule](#).

## 7 [User Support](#)

7.1. The [GES Provider](#) will provide a service desk to provide technical support. This service desk will manage all [GES User](#) service contacts such as reporting issues and queries.

7.2. The [GES Provider](#) service desk shall be made available 24hrs a day, seven days a week to enable [GES Users](#) and [Authorised Persons](#) to raise service desk tickets.

7.3. The [GES Provider](#) shall provide support in accordance with this Paragraph 7 and the [Switching Service Management Schedule](#).

7.4. The [GES Provider](#) shall support the response and resolution times for the following categories.

(a) Priority 1 – for incidents causing critical impact and significant financial loss / disruption - 30 minute response with a four hour resolution time;

(b) Priority 2 – for incidents causing non-critical impact with non-significant financial

loss / disruption - one hour response with a 24 hour resolution time;

- (c) Priority 3 – for incidents causing adverse impact but can be reduced to moderate adverse impact - three [Working Hours](#) response with a three [Working Day](#) resolution time;
- (d) Priority 4 – for incidents causing minimal impact - one [Working Day](#) response with a 10 [Working Day](#) resolution time.

## 8 [Service Levels](#)

8.1. The [GES Provider](#) shall respond to [Market Messages](#) relating to secured [Switches](#) from the [CSS Provider](#) at [Gate Closure](#) (from the point at which the [System](#) receives the first message to the point at which it sends the acknowledgement of receipt for the last message) as follows:

<b><i>Performance Parameter</i></b>	<b><i><a href="#">Performance Level</a></i></b>
<b><i>Processing of data received from the <a href="#">CSS</a> relating to <a href="#">Secured Active Switches</a> during <a href="#">Gate Closure</a> period</i></b>	
Up to and including average daily volume	mean response time of 20 minutes or less
Up to and including average daily volume	90th percentile response time of 25 minutes or less
Above average daily volume and up to and including until peak daily volume	mean response time of 35 minutes
Above average daily volume and up to and including until peak daily volume	90th percentile response time of 40 minutes

8.2. The [GES Provider](#) shall respond to [Market Messages](#) from the [CSS Provider](#), other than within the [Gate Closure](#) period as follows:

<b><i>Performance Parameter</i></b>	<b><i><a href="#">Performance Level</a></i></b>
<b><i>Processing of data received from the <a href="#">CSS</a> outside of the <a href="#">Gate</a></i></b>	

<b><u>Closure period</u></b>	
Up to and including average hourly volume	mean response time of six seconds or less
Up to and including average hourly volume	90th percentile response time of 10 seconds or less
Above average hourly volume and up to and including until peak hourly volume	mean response time of 10 seconds or less
Above average hourly volume and up to and including until peak hourly volume	90th percentile response time of 15 seconds or less

- 8.3. The [GES Provider](#) shall make data updates from [CSS](#) available to [Authorised Persons](#) within the 15 minutes from the point that the response has been sent to the [CSS Provider](#) in Paragraphs 8.1 and 8.2.
- 8.4. The [GES](#) shall respond to an enquiry from a [GES User](#) (from the point at which [GES](#) receives the request to the point at which [GES](#) sends the response) as follows:

<b><i>Performance Parameter</i></b>	<b><i>Performance Level</i></b>
<b><i>Responding to a query from a <a href="#">GES User</a></i></b>	
Up to and including average hourly volume	mean response time of three seconds or less
Up to and including average hourly volume	90th percentile response time of six seconds or less
Above average hourly volume and up to and including until peak hourly volume	mean response time of five seconds or less
Above average hourly volume and up to and including until peak hourly volume	90th percentile response time of eight seconds or less

### Processing of data from the [CDSP](#)

- 8.5. The [GES](#) shall process data received from the [CDSP](#) in accordance with the following [Service Levels](#):
- (a) data required within the Supply Point Switching API (as defined in the [GES](#) API [Technical Specification](#)) shall be available to [Authorised Persons](#) within 2 hours of an update being accepted from the relevant [Shipper](#); and
  - (b) data not required within the Supply Point Switching API (as defined in the [GES](#) API [Technical Specification](#)) accepted by the [CDSP](#) before 04:00 hours shall be available to [Authorised Persons](#) by 09:00 hours on the same day.

### Management of BCDR events

- 8.6. Where a BCDR event is invoked, the [Recovery Time Objective](#) for the [GES](#) will be:
- (a) four hours target time; and
  - (b) eight hours maximum time.
- 8.7. Where a BCDR event is invoked, the [Recovery Point Objective](#) for the [GES](#) will be 30 minutes.

## 9 Maximum Demand Volumes

- 9.1. The [GES](#) has been designed based on the requirements set out below. Where the values are breached, the service received by the [GES User](#) may not be subject to the expected service levels. Any such failure to meet the expected service levels will not constitute a breach by the [GES Provider](#).
- 9.2. Where maximum demand volumes are breached within a given month the [GES Provider](#) shall report the breach incident to the [REC Performance Assurance Board](#), and any impacts reported against the service. The [Code Manager](#) may initiate a [Change Proposal](#) to increase the maximum demand volumes.
- 9.3. The [GES](#) online portal can support 750 concurrent [Authorised Persons](#).
- 9.4. The [GES](#) API service is designed to a maximum of 120 concurrent connected machine to machine interfaces.

### Receipt of Data from the [CSS Provider](#)

- 9.5. The [GES](#) shall have the capability to process, as a minimum, [Market](#)

[Messages](#) relating to the following volume of successful [Switch Requests](#):

- (a) average daily volume of 17,766;
  - (b) a peak daily volume of 118,272;
  - (c) an average hourly volume of 1,470;
  - (d) a peak hourly volume of 10,626; and
  - (e) an annual volume of 6,489,000.
- 9.6. In addition, the [GES](#) shall be capable of processing [Market Messages](#) from the [CSS Provider](#) relating to an annual volume of 157,836 [Initial Registration Requests](#).
- 9.7. In exceptional circumstances, the [GES](#) shall be capable of processing [Market Messages](#) from the [CSS Provider](#) relating to 105,000 [Switch Requests](#) in addition to the average daily volume.

#### **Receipt of Data from [Gas Central Data Service](#)**

- 9.8. The [GES](#) provisions data from the [Gas Central Data Service](#). Since this is a logical interface and there is no specific storage within the [GES](#), no constraints are identified with receipt of this data from this source.

#### **Receipt of Enquiries from [GES Users](#)**

- 9.9. The [GES](#) shall be capable of processing enquiries at volumes of three times those of [Switch Requests](#), i.e.:
- (a) average daily volume 53,298;
  - (b) peak daily volume 354,816;
  - (c) average hourly volume 4,410;
  - (d) peak hourly volume 31,878; and
  - (e) annual volume 19,467,000.

## **10 Reporting**

- 10.1. The following reports will be generated by the [GES](#) and provided to the recipient on request, or as part of a defined schedule.

<b>Report Name</b>	<b>Timescale(s)</b>	<b>Description</b>
Performance Reporting	Monthly	The <a href="#">GES Provider</a> shall provide data relating to the use of the service for consideration by the <a href="#">REC Performance Assurance Board</a> .
User Detail Report	Monthly, Annually or Ad-hoc	The <a href="#">MAU</a> of a <a href="#">GES User</a> can request various reports containing data about its <a href="#">Authorised Persons</a> and status. These reports contain: <ul style="list-style-type: none"> <li>(a) Authorised Person name;</li> <li>(b) Authorised Person status; and</li> <li>(c) Authorised Person provisioning activity by <a href="#">GES User</a> e.g. deletions.</li> </ul>
SoLR Portfolio Report	Ad-hoc	The <a href="#">Replacement Supplier</a> (appointed as a result of a <a href="#">Last Resort Supply Direction</a> ) can request a report detailing <a href="#">Supply Meter Point</a> and <a href="#">Metering Asset</a> details for all <a href="#">Supply Meter Points</a> within the failed <a href="#">Energy Supplier</a> portfolio.
Supplier Registration Report ( <a href="#">MEM</a> )	Monthly, Annually or Ad-hoc	A report provided to each <a href="#">MEM</a> , specifying the <a href="#">Registered Supplier</a> for all <a href="#">Supply Meter Points</a> where the <a href="#">MEM</a> is recorded within the <a href="#">Central Gas Register</a> . <p>Further reports available on request, subject to a separate charge.</p>
Portfolio Data ( <a href="#">MEM</a> )	Monthly, Annually or Ad-hoc	A report provided to each <a href="#">MEM</a> , detailing <a href="#">Supply Meter Point</a> and <a href="#">Metering Asset</a> details for all <a href="#">Supply Meter Points</a> where the <a href="#">MEM</a> is recorded within the <a href="#">Central Gas Register</a> . <p>Further reports available on request, subject to a separate charge.</p>

Supplier Registration Report ( <a href="#">MAP</a> )	Monthly, Annually or Ad-hoc	A report provided on request to the relevant <a href="#">MAP</a> , specifying the <a href="#">Registered Supplier</a> and <a href="#">Metering Asset</a> details for all <a href="#">Supply Meter Points</a> where the <a href="#">MAP</a> is recorded within the <a href="#">Central Gas Register</a> .
Portfolio Data ( <a href="#">MAP</a> )	Monthly	A report provided on request to the relevant <a href="#">MAP</a> detailing <a href="#">Supply Meter Point</a> and <a href="#">Metering Asset</a> details for all <a href="#">Supply Meter Points</a> where the <a href="#">MAP</a> is recorded within the <a href="#">Central Gas Register</a> .
Supplier Registration Report ( <a href="#">PPMIP</a> )	Ad-hoc	A report provided on request to the <a href="#">PPMIP</a> , specifying the <a href="#">Registered Supplier</a> against <a href="#">Supply Meter Points</a> specified by the <a href="#">PPMIP</a> .
Housing Association Report	Ad-hoc	A report provided on request to a Housing Association confirming if there is a live gas supply at a property.
AltHAN Co Report	Quarterly	A report provided to AltHAN Co to assess solutions for premises that require an alternative home area network in order for a <a href="#">Smart Metering System</a> to be effective.

## 11 Additional Services

- 11.1. In addition to the standard service defined in Paragraphs 1 to 10, the [GES Provider](#) may agree to provide additional services to [GES Users](#), based on data received in its role as [GES Provider](#).
- 11.2. Additional services may include the provision of reports and API services to individual [GES Users](#) on a bilateral basis. Reports may be made available to the [Authorised Person](#) via secure FTP or other secure method as agreed with the [GES User](#).
- 11.3. The data and reports made available via such additional services must only contain [GES](#) provisioned data that is accessible by the relevant category of [GES User](#), as defined in the [Data Access Matrix](#).
- 11.4. Paragraph 11.3 does not prevent the use of data provided by the [GES User](#), or other publicly available data, from being used as part of any such additional services.

## 12 System Audit

- 12.1. For the purposes of audit management, the following data shall be available:

- (a) [GES](#) online portal will record the:
- (i) identity of the [GES User](#);
  - (ii) identity of the [Authorised Person](#); and
  - (iii) time and date of the session.

- (b) [GES](#) API service will record the:
- (i) identity of the [GES User](#); and
  - (ii) time and date of the transaction.

12.2. The system must be capable of accommodating the scrutiny of formal and informal audits by [RECCo](#) (or its agent), or any other person legally entitled to carry out such an audit.

### 13 Data Handling

13.1. The [GES](#) shall be capable of storing information related to all [Supply Meter Points](#) in Great Britain, excluding [Twinstream Meter Points](#), [Shared Supply Meter Points](#) and [Gas Interconnectors](#).

13.2. The [GES](#) shall be capable of expansion to support a 157,836 increase in the number of [Supply Meter Points](#) in the first year of the [CSS](#)'s operation.

13.3. The [GES](#) shall be capable of holding five years' worth of [CSS Market Messages](#) online.

#### Receipt of [Gas Central Data Service](#) data

13.4. Data will be provided to [GES](#) from the gas [Central Data Service](#). This logical interface is within the [CDSP](#) estate and is not therefore defined in this [Code](#).

13.5. Data received from the [CDSP](#) will be available via the online portal and API service within the timescales set out in Paragraph 8.

#### Receipt of [CSS](#) Data

13.6. The [GES Provider](#) shall receive data from the [CSS Provider](#) and provide an initial response within the timescales set out in Paragraph 8. Data received from the [CSS](#) will be available via the online portal and API service within the timescales set out in Paragraph 8.



- 13.7. Data will be received from the [CSS Provider](#) via [Market Messages](#) using an interface which is based on a Microsoft Azure cloud environment. The interface will provide information via specific [Market Messages](#), based on the event type.
- 13.8. When incoming updates to the [GES Provider](#) are processed on a chronological basis, [Market Messages](#) from the [CSS Provider](#) shall be processed before updates originating from the [Gas Central Data Service](#).

## 14 Security

### [GES API](#)

- 14.1. The RESTful endpoints of the API service are available over HTTPS only, thereby ensuring that all communication between the web service and the client is secured at the transport level.
- 14.2. The SSL certificate issued for this service is 2048bit SHA2 256 encrypted and as such any server communicating with the [GES API](#) must be capable of understanding this higher-level type of certificate. In order to support this level of certificate [GES Users](#) may need to patch the server making the request, or any intermediary proxy, to include any relevant hot fixes.
- 14.3. Penetration testing of the [GES](#) infrastructure shall be undertaken at least once in each calendar year, and a report provided to the [Code Manager](#) regarding the outcomes of this test, to include any observations or findings, and recommendations for any required remedial actions.
- 14.4. In the event that the [GES Provider](#) detects a potential or suspected security breach impacting switching related [Systems](#), it shall raise a [Switching Incident](#) (in accordance with the [Switching Service Management Schedule](#)).