RETAIL ENERGY CODE

GES Supply Point Enquiry API Technical Specification

1. Overview

The purpose of this API is to expose detailed Supply Meter Point information, enabling subscribers to filter the data by MPRN, Address ID and Address details.

This REST API uses MS Azure management for traffic control and additional API security, which requires consumers to subscribe for this API Product in order to consume it with an API Key (mandatory).

2. API Parameters

2.1 Input Parameters

There are 3 different filters that could be applied to the API call, where at least 1 is mandatory. These are mprn, address_id or postcode, the latter could be combined with additional address details as specified below:

#	Name	Type	Length	Description
1	mprn	string	50	Meter Point Reference Number (MRPN). A unique identifier for the point at which a meter is, has been or will be connected to the Gas Network.
2	address_id	string	30	Internal ID that links MPRN to address data (internal use only)
3	postcode	string	10	Post Code
3.1	house_no	string	10	House Number
3.2	sub_building_name	string	40	Sub Building Name
3.3	street	string	40	Street
3.4	town	string	40	Town
3.5	county	string	3	County
3.6	country	string	3	Country
3.7	dependent_street	string	40	Dependent Street
3.8	dependent_local	string	40	Dependent Locality

2.2 Output Parameters

The following Output parameters are included within the API:

#	Field Name	Type	Length	Description
1	amr_indicator	string	3	Automated Meter Reading (AMR) Indicator Y = AMR Installed; NULL = AMR not Installed
2	amr_sp	string	3	A unique three character code used to identify the Automated Meter Reading (AMR) Service Provider
3	csep_id	string	10	The unique identifier for the Connected System Exit Point (CSEP). Only populated where the Gas Distribution Network is currently an iGT.
4	current_supplier_name	string	40	Name of the current Supplier for the supply meter point.
5	dcc_service_flag	string	10	Data Communications Company (DCC) Service Flag. A DCC provided flag to indicate the status of the services being provided by the DCC to a Meter A = Active; S = Suspended; W = Withdrawn
6	dcc_service_flag_efd	date	10	The first inclusive calendar date for which the status of Data Communications Company (DCC) Service Flag applies.
7	first_smets_installation_date	date	10	First Smart Metering Equipment Technical Specifications (SMETS) Installation Date
8	formula_year_offtake_quantity	string	25	The current value for SOQ of the supply point that is fixed throughout the formula year for determination of transportation rates. Value in kWh.
9	formula_year_annual_quantity	string	25	First Smart Metering Equipment Technical Specifications (SMETS) Installation Date
10	ihd_install_status	string	10	Information from the Supplier regarding the status/existence of the In Home Display (IHD) at a supply point. I = Installed; E = Existing; D = Declined; F = Failed
11	incoming_supplier	string	10	A unique three character code used to identify the Incoming Supplier.
12	installing_supplier_id	string	10	A unique three character code used to identify the Supplier responsible for the first SMETS Meter Installation at the supply point.
13	interruption_contract_exists	string	1	Indicator to identify whether an Interruption Contract Exists on the supply meter point. Y = Yes; NULL = No.
14	isolation_status	string	10	Isolation Status
15	latest_meter_read_date	date	10	Latest Meter Read Date

16	latest_meter_read_type	string	2	Latest Meter Read Type
17	latest_meter_read_value	string	12	Latest Meter Read Value
18	mam_short_code	string	10	A unique three character code used to identify the Meter Asset Manager (MAM)

19	meter_device_status	string	2	A code indicating the current status of the meter installed at the supply point. LI = Live; FA = Faulty; IN = Inactive; CU = Cut off Meter; CL = Clamped; CA = Capped; SP = Spin Cap; OT = Other; UN = Unknown; NI = Not Installed; RE = Removed.
20	meter_imperial_indicator	string	1	Indicator identifying if the meter measures volume of gas consumed in metric or imperial units. Y = Imperial meter; N = Metric meter
21	meter_number_of_dials	string	2	Number of dials or digits on the meter which are considered during meter reading
22	meter_type	string	8	The type of meter installed at the supply point. R = Rotary; T = Turbine; D = Diaphragm of unknown material; L = Leather Diaphragm; S = Synthetic Diaphragm; U = Ultrasonic; Z = Unknown; O = Orifice.
23	mprn	string	50	Meter Point Reference Number (MRPN). A unique identifier for the point at which a meter is, has been or will be connected to the Gas Network.
24	network_name	string	40	Gas Distribution Network Name
25	network_owner_effective_from_date	date	10	Date the network owner is effective from for a supply meter point.
26	smso_id	string	10	The identity of the operator, a Supplier has procured data and communication services from, in respect of a Smart Metering System.
27	sms_operating_entity_efd	date	10	The date on which the Smart Meter System Operator (SMSO) becomes effective.
28	supply_point_withdrawal_status	string	10	Identifies if the site is not registered to a Shipper or the current Shipper has withdrawn. Y = Withdrawn; N = Not Withdrawn.
29	twin_stream_site_indicator	string	10	Indicates if the supply meter point is currently a twin stream site. Y = Yes; NULL = No.
30	address_id	string	30	Internal ID that links MPRN to address data (internal use only)
31	postcode	string	10	Postcode
32	house_no	string	10	House Number

33	house_name	string	40	House Name
34	sub_building_name	string	40	Sub Building Name
35	street	string	40	Street
36	town	string	40	Town
37	county	string	3	County
38	country	string	3	Country
39	dependent_street	string	40	Dependent Street

40	dependent_local	string	40	Dependent Locality
41	double_dependent_local	string	40	Double Dependent Locality
42	po_box_no	string	10	PO Box Number
43	delivery_point_alias	string	50	Delivery Point Alias
44	current_supplier	string	40	A unique three character code used to identify the current supplier
45	meter_point_status	string	10	The current status of the operability of the supply meter point. LI = Live; DE = Dead; CA = Capped; CL = Clamped; PL = Planned.
46	market_sector_code	string	10	A code that specifies that the site is used for domestic or industrial and commercial purposes. D = Domestic; I = Industrial
47	ldz_id	string	10	Unique reference code for the Local Distribution Zone (LDZ).
48	meter_capacity	string	15	The amount of gas that can be passed through the meter in a given time period. This is the manufacturer's maximum value.
49	meter_mechanism	string	5	The coded value of the description of the Meter Mechanism. CR = Credit; MT = Mechanical Token; ET = Electronic Token; CM = Coin; PP = Prepayment; TH = Thrift; U = Unknown; NS = SMETS non-compliant; S1 = SMETS Version 1; S2 = SMETS Version 2.
50	msn	string	30	The manufacturer's meter serial number as held on the physical meter currently installed on the supply point.
51	annual_quantity	string	25	The current annual offtake quantity (AQ) of a Supply Meter Point. Value in kWh.
52	class	string	10	Denotes the current class type for the Supply Meter Point. VALUES: 1 - Class 1, 2 - Class 2, 3 - Class 3, 4 - Class 4
53	uprn	string		
54	shipper_short_code	string	10	Specifies the 3 digit unique Shipper Short Code for the current Shipper

55	end_user_category_code (portifolio)	string	12	A unique reference for the End User Category assigned to the Supply Point *(only visible where the Supply Point is within the requesters portfolio)*
56	previous_supplier_name (portifolio)	string	40	Name of the last previous Supplier assigned to the Supply Point *(only visible where the Supply Point is within the requesters portfolio)*
57	previous_supplier_short_code (portifolio)	string	10	Specifies the 3 digit unique Supplier Short Code for the previous Supplier *(only visible where the Supply Point is within the requesters portfolio)*
58	confirmation_reference_number (portifolio)	string	20	A sequential number that uniquely identifies the Confirmation *(only visible where the Supply Point is within the requesters portfolio)*

59	confirmation_effective_date (portifolio)	date	10	Date on which the current Shipper took over responsibility for the Supply Point *(only visible where the Supply Point is within the requesters portfolio)*
60	priority_consumers_indicator (portifolio)	string	1	The category of priority consumer at the Supply Meter Point. VALUES: A - Category A: Organisations providing a relevant vital social need for example; Institutions providing care for those to be at risk through age, sickness or infirmity e.g. hospitals, convalescent and nursing homes, homes for the elderly or disabled. C - Category C - Consumers without an alternative fuel source, who if they ceased offtake in the timescales required, would risk damage to essential plant with a replacement value exceeding £50 million. (only visible where the Supply Point is within the requesters portfolio)
61	meter_read_batch_frequency (portifolio)	string	10	The frequency on which reads will be received for class 3 Supply Meter Points. VALUES: W- 7 days, F – 14 days, M – month, 6 – 6 monthly. (only visible where the Supply Point is within the requesters portfolio
62	csep_max_annual_quantity (portifolio)	string	12	The total projected maximum annual offtake (AQ) of gas (measured in kWh) of all Supply Meter Points associated with this CSEP's connection to the upstream network. (only visible where the Supply Point is within the requesters portfolio)

63	original_supply_meter_point_annual_quantity (portifolio)	decimal	16,7	The initial estimated Annual Quantity for the Supply Meter Point *(only visible where the Supply Point is within the requesters portfolio)*
64	supply_meter_point_current_year_minimum_annual_quantity (portifolio)	decimal	16,7	The minimum bookable annual capacity based on the historic maximum annual offtake for a Supply *(only visible where the Supply Point is within the requesters portfolio)*
65	csep_supply_point_offtake_quantity (portifolio)	decimal	17,3	The daily offtake (SOQ) of gas (measured in kWh) of all Supply Points associated with the CSEP's connection to the upstream network, calculated from the EUC AQ and DM SOQ information *(only visible where the Supply Point is within the requesters portfolio)*
66	meter_manufacturer (portifolio)	string	15	Identifies the Short code of meter manufacturer of the meter installed at the Supply Point *(only visible where the Supply Point is within the requesters portfolio)*
67	meter_model (portifolio)	string	30	The model description of the meter installed at the Supply Point *(only visible where the Supply Point is within the requesters portfolio)*
68	meter_year_of_manufacture (portifolio)	string	4	The year in which the meter installed at the Supply Point was manufactured expressed as a century date (e.g. 1981) *(only visible where the Supply Point is within the requesters portfolio)*
69	meter_installation_date (portifolio)	date	10	Date the meter was installed at the Supply Point *(only visible where the Supply Point is within the requesters portfolio)*
70	meter_units (portifolio)	decimal	17,3	This contains the units the meter installed on a Supply Point is reading in e.g. 10, 100, 1000 (only visible where the Supply Point is within the requesters portfolio)

71	meter_location (portifolio)	string	2	A code representing the location of a meter installed at the Supply Point VALUES: 0 - Unknown, 1 - Cellar, 2 - Under Stairs, 3 - Hall, 4 - Kitchen, 5 - Bathroom, 6 - Garage, 7 - Canteen, 8 - Cloakroom, 9 - Cupboard, 10 - Domestic, 11 - Front Door, 12 - Hall Cupboard, 13 - Kitchen Cupboard, 14 - Kitchen under the sink, 15 - Landing, 16 - Office, 17 - Office Cupboard, 18 - Outside WC, 19 - Pantry, 20 - Porch, 21 - Public Bar, 22 - Rear of Shop, 23 - Saloon Bar, 24 - Shed, 25 - Shop Front, 26 - Shop Window, 27 - Staff Room, 28 - Store Room, 29 - Toilet, 30 - Under Counter, 31 - Waiting Room, 32 - Meterbox, 98 – Other, 99 – Outside (only visible where the Supply Point is within the requesters portfolio)
72	correction_factor (portifolio)	decimal	17,12	This is a fixed factor where no convertor is fitted and the meter reading needs to be corrected for Pressure/Altitude/Temperature. Format: 999.999999 *(only visible where the Supply Point is within the requesters portfolio)*
73	gas_act_owner (portifolio)	string	1	Unique code which identifies the role the market participant is acting in. Values : T - GAO Transporter , S - GAO Supplier , C - GAO Consumer, U – Unknown. (only visible where the Supply Point is within the requesters portfolio)
74	meter_asset_manager_effective_date (portifolio)	date	10	The date on which Meter Asset Manager (MAM) is effectively responsible for the meter assets at the Supply Point *(only visible where the Supply Point is within the requesters portfolio)*
75	supply_meter_point_shq	String	25	Supply Meter Point SHQ
76	shipper_name	string	40	Name of the current Shipper assigned to the Supply Point
77	igt_transportation_charge_rate	decimal	17,3	The monetary rate that is applicable to the Supply Meter Point for iGT transportation charges. CONTEXT: Excludes infill charges where IGT Charging Methodology = “I”
78	igt_transportation_charge_rate_type	string	1	Indicator showing the type of iGT Transportation Charge Rate being applied. VALUES: D - Pence Per Day K - Pence Per Kilowatt.

79	igt_charging_methodology	string	1	The iGT charging methodology that is applied to the Supply Point. VALUES: L - LEGACY, R - RPC, I - INFILL
80	meter_link_code	string	1	A code specifying the functional relationship between meters (the way in which they are linked together) at given locations on an End User's site to be described. VALUES: P = Primary Meter, S = Sub-meter, F = Free standing meter
81	end_user_category_identifier	string	10	A unique reference for the End User Category assigned to the Supply Point
82	offtake_quantity	string	25	The current value for the peak daily supply offtake quantity (SOQ) of a supply point. Value in kWh
83	small_large_supply_point_indicator	String	3	Indicator showing if a Supply Point is Large (LSP) or Small (SSP) Annual Quantity threshold of 73,200 kWh
84	daily_metered_indicator	String	17	Indicator showing if the Supply Meter Point is Daily Metered Values: Daily Metered, Non Daily Metered
85	convertor_indicator	boolean	1	Indicator for the presence of a Converter Asset Values: Y = Yes, N = NO
86	exit_zone	string		Exit Zone
87	smp_prospective_formula_year_aq	string		Prospective Formula Year AQ value. 'Prospective' is a synonym for 'Perspective'
88	smp_prospective_formula_year_soq	string		Prospective Formula Year SOQ value. 'Prospective' is a synonym for 'Perspective'
89	smp_prospective_formula_year_effective_date	string		Prospective Formula Year effective date. 'Prospective' is a synonym for 'Perspective'

3. Error Codes and Descriptions

The following table contains the implemented error codes

HTTP Code	Error Code	Fault String
400	-	-
500	steps.regexprotection.ThreatDetected	Regular expression threat is detected in the API request, please check the data entered.
401	steps.oauth.v2.FailedToResolveAPIKey	Application Key sent in API request is either empty or invalid.
500	policies.custom.config.1	Application creation process has not completed due to technical issues, please contact or raise a fault with the system administrator.
500	policies.custom.config.2	Application creation process has not completed due to technical issues, please contact or raise a fault with the system administrator.

500	policies.custom.config.3	Application creation process has not completed due to technical issues, please contact or raise a fault with the system administrator.
500	policies.ratelimit.SpikeArrestViolation	Number of API requests for [product] has exceeded the allowed spike limit of [__] per [minute].
500	policies.ratelimit.QuotaViolation	Number of API requests for [product] has exceeded the allowed quota limit of [__] per month.
400	e001	Request cannot be empty, please submit at least one unique identifier.
200	e002	Requested address has twin stream meter device. You are not authorised to view this data.
200	e003	Requested address has shared supply meter device. You are not authorised to view this data.
200	e004	Requested address has twin stream and shared supply meter device. You are not authorised to view this data.
200	e005	Requested address has extinct meter device. You are not authorised to view this data.
200	e006	Requested address has non domestic meter device. You are not authorised to view this data.
200	e007	Requested meter reference number is not found.
200	e008	Requested meter reference number has more than one matching records; data can only be provided for unique match.
200	e009	Submitted address details has multiple records; data is only provided for unique number.
500	e010	Unexpected error occurred while processing request
200	e011	Requested address has no matching record. This may be because, there is no gas meter at this property (or) full postcode with a space is not entered (or) the entered details are incorrect.

4. Sample Request / Response

4.1 Requests

The following are the API requests:

#	Request	Request description
1	/v1/Supplier.svc?mprn=1234567890	MPRN query option
2	/v1/Supplier.svc?address_id=1234567890	ADDRESS_ID query option
3	/v1/Supplier.svc?postcode=CV327AA&house_no=11	Address details query option

4.2 Responses

For any positive response for the requests above, there will always be only **one** record returned:

#	Response	Response description

1,2,3	{
	"supplier": {
	"amr_indicator": " ",
	"amr_sp": " ",
	"csep_id": " ",
	...
		Positive responses

5. Common Elements

5.1 Header Information [Request]

#	Header type	Header Options	Header Optionality
1	APIKey		Required

6. Version Control

Version (Status)	Description	Date	Contributor
V0.1 (First)	Draft	08/02/2022	Mark Pollard
V1.0	Live	18/07/2022	Mark Pollard
V2.0	Live – section 4.2 corrected	09/10/2024	Richard Johnson