Energy Market Data Specification

Standards Definition Document

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*Change History*

|  |  |  |
| --- | --- | --- |
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| 0.3 | N/A | Draft for December Consultation |
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# Introduction

## The Energy Market Data Specification has been developed to create a common set of standards for all industry data represented within the Energy Market Architecture Repository (EMAR). Data has been consolidated from existing industry codes, creating a common standard for documenting all relevant industry data and messaging, associated to several different Physical Messaging Standards.

## Physical Messaging Standards are defined by the Service Providers responsible for their respective Messaging Services, governed under this Code or other relevant Energy Codes[[1]](#footnote-2). The Energy Market Data Specification defines which permissible Physical Messaging Standards apply to each message.[[2]](#footnote-3)

## The creation of a common standard has resulted in changes to how data and messaging is logically represented in comparison to legacy code documentation, however the common standard does not require any changes to any existing Physical Messaging Standards.

## This document provides an illustrative and logical view of the Data Specification, as such, it is intended that this document will be replaced by a number of other artefacts once the Code Manager has developed the physical design of the EMAR.

## This document acts as a standards definition to support the initial version of the Data Specification prior to the development of the EMAR.

## The EMAR will have the capability to make the Data Specification Meta Data Model more accessible which will remove the requirement for the illustrative text within this document. This document does not contain any additional data (or definition of data) beyond the data contained within the Data Spec version 20.00.00[[3]](#footnote-4).

# Energy Market Data Specification Object Classes

## This section provides a definition of each Object Class[[4]](#footnote-5) within the Data Specification and each Object Class’ associated Data Elements[[5]](#footnote-6).

## The Data Specification Metadata Model is represented by a relational data model diagram, shown in Annex A.

## **Datatype Format**

## An Energy Market Data Item will conform to a Datatype Format:

|  |  |
| --- | --- |
| **Datatype Format Name** | **Datatype Format Definition** |
| string | A general character string. |
| boolean | Two values permitted representing true or false. |
| number | Only numeric characters 0 to 9, minus sign and decimal point characters permitted. |

## **Datatype Format Rule**

## A Datatype Format Rule supports a specific datatype validation requirement for one or more Physical Messaging Standards. Whilst this creates additional complexity it is required to support existing and legacy code standards without a requirement for physical change.[[6]](#footnote-7)

## An Energy Market Data Item will conform a to a Datatype Format Rule:

|  |  |  |
| --- | --- | --- |
| **Datatype Format Rule Name** | **Datatype Format Rule Definition** | **Related Datatype Format Name** |
| high resolution datetime | A high resolution datetime format conforming to RTC3339. | string |
| calendar date | A calendar date, represented in the following convention: YYYYMMDD. | number |
| 24-hour time | A calendar time in an unstated calendar day. Represented in the following convention: hhmmss. | number |
| Universally Unique Identifier (UUID) | An identifier conforming to the standard RFC4122. | string |
| time stamp | A high resolution, local time in a calendar day. Represented in the following convention: YYYYMMDDhhmmss.ssssss. | string |
| datetime | A calendar date and time represented by the following convention: YYYYMMDDhhmmss. | number |
| positive decimal number | A negative numeric value is not permissible, must contain a [.] character and all other characters must be numeric. The number of characters following the decimal point must be defined for each Energy Market Data Item subject to this rule. | string |
| decimal number | A positive or negative decimal number which must contain the [.] character and may contain a leading [–] character if the number is negative, all other characters must be numeric. The number of characters following the decimal point must be defined for each Energy Market Data Item subject to this rule. | string |
| integer | Only numeric characters permitted and no leading zero. | number |
| indicator (true/false) | A Boolean value domain of true or false. | boolean |
| indicator (T/F) | A Boolean value domain of T or F. | boolean |
| edifact level B DTS variant | A general character string inclusive of all Edifact Level B characters and the [\_] and [@] characters. | string |
| edifact level B gas metering variant | A general character string inclusive of all Edifact Level B characters, except for the [“] character; the [\_] character is permitted. | string |

## **Energy Market Data Item**

## An Energy Market Data Item shall be composed of the following Data Elements:

|  |  |  |  |
| --- | --- | --- | --- |
| **Data Element Name** | **Data Element Definition** | **Requirement Type** | **Conditional Requirement Rule** |
| energy market data item identifier | A unique identifier for an Energy Market Data Item. | Mandatory |  |
| data item name | The meaningful title of an Energy Market Data Item. | Mandatory |  |
| data item definition | A description of an Energy Market Data Item. | Mandatory |  |
| dtc legacy reference | The unique identifier previously attributed to an Energy Market Data Item within the Data Transfer Catalogue. | Conditional | An Energy Market Data Item previously recorded in the Data Transfer Catalogue will retain a DTC legacy reference. |
| spaa legacy reference | The unique identifier previously attributed to an Energy Market Data Item within the gas Supplier Data Flow Catalogue. | Conditional | An Energy Market Data Item previously recorded in the Supplier Data Flow Catalogue will retain a SPAA legacy reference. |
| rgma legacy reference | The unique identifier previously attributed to an Energy Market Data Item within the RGMA Data Flow Catalogue. | Conditional | An Energy Market Data Item previously recorded in the RGMA Data Flow Catalogue will retain a RGMA legacy reference. |
| unc reference | The unique identifier of an Energy Market Data Item within the UKLink Manual. | Conditional | An Energy Market Data Item for with the UNC is the Meta Data Owner will be prescribed a UNC reference. |
| data item physical length | The total number of characters permissible for an Energy Market Data Item[[7]](#footnote-8). | Mandatory |  |
| data item decimal length | The number of characters required to be present following a decimal point character. | Conditional | Must not be null for an Energy Market Data Item if either the decimal number or positive decimal number data type format rule is applicable (paragraph 2.5). |
| datatype format rule identifier | A unique identifier for a Datatype Format Rule applicable to a specific Energy Market Data Item (paragraph 2.5). | Mandatory |  |
| Data Item meta data owner | The relevant Energy Code (e.g. the BSC, REC, DCUSA, SEC or UNC) responsible for the configuration management of the meta data associated with the Energy Market Data Item. Changes to the meta data are administered via the change management or modification process under the relevant Energy Code, in conjunction with the administration of the Data Specification by the REC Code Manager as described in the Change Management Schedule. | Mandatory |  |

## **Data Item Enumeration**

## An Energy Market Data Item may have a value domain which is enumerated. If an Energy Market Data Item has a relationship to one or more Data Item Enumeration, then its permissible value domain shall be limited to those values only.

## **Data Item Market Role Governance**

## An Energy Market Data Item may be related to one or many Data Item Market Role Governance Data Services.

## Data Item Market Role Governance identifies a Market Data Service which performs one of the Market Role Data Governance Types for an Energy Market Data Item referenced in the below table.

|  |  |
| --- | --- |
| **data governance type name** | **data governance type definition** |
| authorised provider | A Market Data Service responsible for the storage of the data item within a central service and provision of that data, via Energy Market Messages to other Market Data Services. (e.g. the Electricity Enquiry Service provides this role for data items for which the CSS is the Data Master). |
| data master | A Market Data Service responsible for the stewardship of the data quality for the Data Item, responsible for the cleansing of that data and in most cases responsible for the creation and update of the Energy Market Data Item Value. |
| data responsible user | A Market Participant responsible for notifying the Data Master, on an ongoing basis, of improvements to data quality including if the fitness for purpose of an Energy Market Data Item has been compromised. Data Responsible Users are required to support the Data Master in data cleansing activities. |

## **Energy Market Message**

## An Energy Market Message is composed of the following data elements:

|  |  |  |  |
| --- | --- | --- | --- |
| **Data Element Name** | **Data Element Definition** | **Requirement Type** | **Conditional Requirement Rule** |
| energy market message identifier | A unique identifier for an Energy Market Data Item. | Mandatory |  |
| dts message reference | An identifier unique to the Data Transfer Service, required for the purposes defined within that services Physical Messaging Standard. | Conditional | Electricity Energy Market Messages which have a related Permissible Message Means of data transfer service must have a dts message reference (paragraph 2.11). |
| rgma message reference | An identifier unique to the Data Transfer Service or UKLink Information Exchange, required for the purposes defined within those services Physical Messaging Standards. | Conditional | Gas Energy Market Messages which have a related Permissible Message Means of data transfer service and uklink information exchange must have a rgma message reference (paragraph 2.11). |
| spaa message reference | An identifier unique to the Data Transfer Service, required for the purposes defined within that services Physical Messaging Standard. | Conditional | Gas Energy Market Messages which have a related Permissible Message Means of data transfer service must have a spaa message reference (paragraph 2.11). |
| uklink file reference | An identifier unique to the UKLink Information Exchange, required for the purposes defined within that services Physical Messaging Standard. | Conditional | Energy Market Messages for which the UNC is the Meta Data Owner must have a uklink file reference. |
| css message reference | A reference utilised within the Switching Programme logical design, retained for illustrative purposes only. | Conditional | Energy Market Messages which have a related Permissible Message Means of central switching service communications must have a css message reference (paragraph 2.11). |
| energy market message name | The meaningful title of an Energy Market Message. | Mandatory |  |
| energy market message definition | A description of an Energy Market Message. | Mandatory |  |

### **Permissible Message Means**

## Where required under code or for other technical, interoperability or security requirements; an Energy Market Message is related to one or more Permissible Message Means, which in turn are associated to a defined Energy Market Message Means Type as detailed in the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| **message means type name** | **message means type description** | **physical messaging standard name** | **Message means abbreviation** |
| data transfer service | It is permissible that the Energy Market Message is sent via the Data Transfer Service. The message must conform to the Physical Messaging Standard defined by the Data Transfer Service and the specification of each related Energy Market Scenario Variant defined within the Energy Market Data Specification. | User File Design Specification (UFDS)[[8]](#footnote-9) | DTS |
| central switching service communications | It is permissible for the Energy Market Message to be sent via the Central Switching Service APIs. The message must conform to the Physical Messaging Standard defined by the CSS; and the specification of each related Energy Market Scenario Variant defined within the Energy Market Data Specification. | CSS Physical Message Standard[[9]](#footnote-10) | CSS API |
| uklink information exchange | It is permissible that the Energy Market Message is sent via the UKLink Information Exchange. The message must conform to the Physical Message Standard defined by Xoserve; and the specification of each related Energy Market Scenario Variant defined within the Energy Market Data Specification. | UKLink Manual[[10]](#footnote-11) | IX |
| secure data exchange portal | It is permissible for the Energy Market Message to be only sent via the Secure Data Exchange Portal. Messaging must conform to the Physical Message Standard defined by the service provider; and the specification of each related Energy Market Scenario Variant defined within the Energy Market Data Specification. | SDEP Physical Message Standard[[11]](#footnote-12) | SDEP |
| gas enquiry service api | It is permissible for the Energy Market Message to be only sent via a Gas Enquiry Service API. Messaging must conform to the Physical Message Standard defined by Xoserve; and the specification of each related Energy Market Scenario Variant defined within the Energy Market Data Specification. | GES Physical Message Standard[[12]](#footnote-13) | GES API |
| electricity enquiry service api | It is permissible for the Energy Market Message to be only sent via an Electricity Enquiry Service API. Messaging must conform to the Physical Message Standard defined by the service provider; and the specification of each related Energy Market Scenario Variant defined within the Energy Market Data Specification. | EES Physical Message Standard[[13]](#footnote-14) | EES API |
| ees ppmip file transfer | It is permissible for the Energy Market Message to be only sent via EES PPMIP File Transfer. Messaging must conform to the Physical Message Standard defined by the service provider; and the specification of each related Energy Market Scenario Variant defined within the Energy Market Data Specification. | EES Physical Message Standard | EPPMIP |
| data service agreed means | It is permissible that the message is sent via any means agreed to by the Source Data Service and the Target Data Service. The Message must conform to, as a minimum, the specification of each related Energy Market Scenario Variant defined within the Energy Market Data Specification. | Not applicable | DSA |
| business email | It is permissible that the message is sent via standard business email. The Message must conform to, as a minimum, the specification of each related Energy Market Scenario Variant defined within the Energy Market Data Specification. | Not applicable | EMAIL |

### **Energy Market Message Scenario Varian**t

## An Energy Market Message will be related to one or more Energy Market Message Scenario Variants. An Energy Market Message Scenario Variant will define the structure of a message sent between two Market Role Data Services under specific conditions or as the result of events which occur within a certain Energy Market Scenario[[14]](#footnote-15).

## Energy Market Message Scenario Variants related to the same Energy Market Message will contain common elements, although each messages physical structure may differ, including but not limited to, its relationship to different Message Scenario Variant Collections (paragraph 2.16).

## An Energy Market Message Scenario Variant identifies a structured data communication undertaken between two Market Role Data Services, defined as the Source Data Service (the service which sends the message) and the Target Data Service (the service which receives the message). The data services defined within the Data Specification may be mapped, in some instances, to a Market Participant Role Code which is mastered by BSCCo and CDSP within their respective Market Domain Data repositories. The below table defines each Market Role Data Service represented within the Data Specification:

|  |  |  |
| --- | --- | --- |
| **market data service abbreviation** | **market data service name** | **Market participant name** |
| BSC | Balancing and Settlement Code Company Data Service | Balancing and Settlement Code Company |
| CDSP | Gas Central Data Service | Gas Central Data Services Provider |
| CFD Generator Invoice Backing Data | Contract for Difference Generator Invoice Backing Data Service | Contract for Difference Generator Invoice Backing Data |
| CFD Settlement Services Provider | Contract for Difference Settlement Services Provider Data Service | Contract for Difference Settlement Services Provider |
| CM Settlement Services Provider | Capacity Management Settlement Services Provider Data Service | CM Settlement Services Provider |
| CSS | Central Switching Service | Central Switching Service Provider |
| DCC | Smart Data Service | Smart Data Service Provider |
| DCUSA | Distribution Connection and Use of System Agreement Company Data Service | Distribution Connection and Use of System Agreement Company |
| Distributor | Distribution Network Operator Data Service | Distribution Network Operator |
| EES | Electricity Enquiry Service | Electricity Enquiry Service Provider |
| Electricity MAP | Electricity Meter Asset Provider Data Service | Electricity Meter Asset Provider |
| Electricity PPMIP | Electricity Pre-Payment Metering Infrastructure Data Service | Electricity Pre-Payment Metering Infrastructure Provider |
| Electricity Supplier | Electricity Supplier Data Service | Electricity Supplier |
| Energy Supplier | Energy Supplier Data Service | Energy Supplier |
| ERDA | Electricity Retail Data Service | Electricity Retail Data Agent |
| Gas MAP | Gas Meter Asset Provider Data Service | Gas Meter Asset Provider |
| Gas PPMIP | Gas Prepayment Metering Infrastructure Data Service | Gas Prepayment Metering Infrastructure Provider |
| Gas Shipper | Gas Shipper Data Service | Gas Shipper |
| Gas Supplier | Gas Supplier Data Service | Gas Supplier |
| GD Licensee | Green Deal Licensee Data Service | Green Deal Licensee |
| GD Provider | Green Deal Provider Data Service | Green Deal Provider |
| GD Remittance Processor | Green Deal Remittance Processor Data Service | Green Deal Remittance Processor |
| GDCC | Green Deal Central Charge Database Data Service | Green Deal Central Charge Database Provider |
| GES | Gas Enquiry Service | Gas Enquiry Services Provider |
| GRDS | Gas Retail Data Service | Gas Retail Data Agent |
| Grid Operator | Grid Operator Data Service | Grid Operator |
| GRS Operator | Generation Registration Service Operator Data Service | GRS Operator |
| GT | Gas Transporter Data Service | Gas Transporter |
| HHDA | Half Hourly Data Aggregator Data Service | Half Hourly Data Aggregator |
| HHDC | Half Hourly Data Collector Data Service | Half Hourly Data Collector |
| MAM | Gas Meter Equipment Manager Data Service | Gas Meter Equipment Manager |
| MAP | Meter Asset Provider Data Service | Meter Asset Provider |
| MDDA | Market Domain Data Service | Market Domain Data Agent |
| MEM | Metering Equipment Manager Data Service | Metering Equipment Manager |
| MOA | Electricity Meter Equipment Manager Data Service | Electricity Meter Equipment Manager |
| NHHDA | Non-Half Hourly Data Aggregator Data Service | Non-Half Hourly Data Aggregator |
| NHHDC | Non-Half Hourly Data Collector Data Service | Non-Half Hourly Data Collector |
| NHHDR | Non-Half Hourly Data Retriever Data Service | Non-Half Hourly Data Retriever |
| NDC | Non-Domestic Consumer Enquiry Service User | Non-Domestic Consumer |
| REC | Retail Energy Code Company Data Service | Retail Energy Code Company |
| RPS | Revenue Protection Data Service | Revenue Protection Agent |
| SEC | Smart Energy Code Company Data Service | Smart Energy Code Company |
| SFIC | Supply Fault Information Centre Data Service | Supply Fault Information Centre Agent |
| SMRS | Supplier Meter Registration Service | Supplier Meter Registration Agent |
| SVAA | Supplier Volume Aggregation Agent | Supplier Volume Aggregation Agent |
| Teleswitch Agent | Teleswitch Data Service | Teleswitch Agent |
| TPU | Third Party Data Service Enquiry Service User | Third Party User |
| PCW | Price Comparison Website Operator Data Service | Price Comparison Website Operator |
| UMSO | Unmetered Supplies Operator Data Service | Unmetered Supplies Operator |
| UNC | Uniform Network Code Data Service | Uniform Network Code |

## An Energy Market Message Scenario Variant is composed of the following Data Elements:

|  |  |  |  |
| --- | --- | --- | --- |
| **data element name** | **data element definition** | **requirement type** | **conditional requirement rule** |
| energy market message scenario variant identifier | A unique identifier for an Energy Market Message Scenario Variant. | Mandatory |  |
| energy market message scenario variant name | A meaningful title for an Energy Market Message Scenario Variant. | Mandatory |  |
| energy market message scenario variant definition | A description of an Energy Market Message Scenario Variant. | Mandatory |  |
| energy market message identifier | A unique identifier for the related Energy Market Message. | Mandatory |  |
| source market role data service identifier | The unique identifier of the Market Data Service which sends an Energy Market Message. | Mandatory |  |
| target market role data service identifier | The unique identifier of the Market Data Service which receives an Energy Market Message. | Mandatory |  |

### **Message Scenario Variant Collection**

## An Energy Market Message Scenario Variant is related to one or more Message Scenario Variant Collections. The physical requirements related to the structure and implementation of a Message Scenario Variant Collection[[15]](#footnote-16) within a physical message is detailed within each Service Providers Physical Message Standard.

## The Message Scenario Variant Collection attributes include the sequence the collection appears within a physical message, if the related Permissible Message Means requires collections to be sequenced (such as those based on delimited files); and rules or conditions relating to its modality or cardinality within a physical file. A Message Scenario Variant Collection instance is unique to an Energy Market Message Scenario Variant.

## A Message Scenario Variant Collection is composed of the following data elements:

|  |  |  |  |
| --- | --- | --- | --- |
| **Data Element Name** | **Data Element Definition** | **Requirement Type** | **Conditional Requirement Rule** |
| message scenario variant collection identifier | A unique identifier for a Message Scenario Variant Collection. | Mandatory |  |
| message scenario variant collection modality | The minimum number of instances that a Message Scenario Collection must occur within an Energy Market Message Scenario Variant. | Mandatory |  |
| message scenario variant collection cardinality | The maximum number of instances that a Message Scenario Collection may occur within an Energy Market Message Scenario Variant. A value of n denotes that no limit is specified. | Mandatory |  |
| message collection requirement type identifier | The unique identifier of a Message Collection Requirement Type. Denotes if a Message Scenario Variant Collection is mandatory, optional, or conditional within an Energy Market Scenario Variant. | Mandatory |  |
| message collection conditional requirement rule | Describes the condition under which a Message Scenario Variant Collection is mandatory. | Conditional | Required if the message collection requirement type identifier relates to a conditional requirement type. |
| energy market message scenario variant identifier | The unique identifier of the Energy Market Message Scenario Variant to which this Energy Market Message Variant Collection is related. | Mandatory |  |
| message collection message identifier | The unique identifier of a Message Collection Message. A Message Collection Message can be related to one or more Energy Market Message Scenario Variant Collections. The data elements of a Message Collection Message include those attributes which are common for collections within Energy Market Messages such as UKLink Record Name or DTS Group Identifier. | Mandatory |  |

### **Message Scenario Variant Data Item**

## A Market Scenario Variant Collection is related to one or more Message Scenario Variant Data Items. A Message Scenario Variant Data Item enables the association of a unique instance of an Energy Market Data Item to a Message Scenario Variant Collection. Specific conditions are applicable to the Message Scenario Variant Data Item, or one or more Variant Data Item Value Rules can be related to a Message Scenario Variant Data Item.

## A Message Scenario Variant Data Item is composed of the following data elements:

|  |  |  |  |
| --- | --- | --- | --- |
| **data element name** | **data element definition** | **requirement type** | **conditional requirement rule** |
| message scenario variant data item identifier | A unique identifier for a message scenario variant data item. | Mandatory |  |
| message scenario variant collection identifier | A unique identifier for a message scenario variant collection. | Mandatory |  |
| data item collection data item identifier | A unique identifier for a data item collection data item. | Mandatory |  |
| data item requirement type identifier | A unique identifier for a data item requirement type. | Mandatory |  |
| data item requirement type rule | The unique identifier of the Market Data Service which sends an Energy Market Message. | Conditional | Mandatory if data item requirement type is conditional. |

## A data item requirement type can be one of the following values:

|  |  |
| --- | --- |
| **Data item requirement type name** | **Data item requirement type definition** |
| Mandatory | The data item value must be not null. |
| Conditional Rule | A Conditional Rule determines if the data item is Not Present or a value is Mandatory. |
| Optional | A data item value can be null or not null. |
| Null | A data item value must be null. |
| Not Required | A data item value should be null. |
| Not Present | A data item must not be present within the Message Scenario Variant. |

## A Message Scenario Variant Data Item may also be associated to one or many Variant Data Item Value Rules. Each rule is written in a standard notation describing a business rule which constrains or provides conditions on what value or range of values is permissible.

## A Message Variant Data Item Value Rule is composed of the following data elements:

|  |  |  |  |
| --- | --- | --- | --- |
| **data element name** | **data element definition** | **requirement type** | **conditional requirement rule** |
| variant data item value rule identifier | A unique identifier for variant data item value rule. | Mandatory |  |
| variant data item value rule name | A meaningful title for a variant data item value rule. | Mandatory |  |
| variant data item value rule definition | A description of a variant data item value rule. | Mandatory |  |



### **Message Scenario Variant Enumeration**

## A Message Scenario Variant Data Item may be related to one or more Message Scenario Variant Enumeration. A Message Scenario Variant Enumeration is composed of a Data Item Enumeration (Paragraph 2.7) and a Message Scenario Variant Data Item, as such the enumerations associated to an Energy Market Data Item may be specific to an Energy Market Message Scenario Variant.

# Energy Market Data Specification Meta Data Model Relational Data Model Diagram

## This diagram represents the full Energy Market Data Specification. Provided in PDF file format within Annex A. Annex A should be viewed in conjunction with this document.

# Data Access Matrix

## The Data Access Matrix defines the access rights that each Data Service has for an Energy Market Data Item via the Electricity Enquiry Service or the Gas Enquiry Service[[16]](#footnote-17). Provided in PDF file format in Annex B.

# Energy Market Data Item Catalogue

## For user research purposes the Energy Market Data Item Catalogue is provided in Microsoft Excel file format in Annex C.

# Energy Market Message Scenario Variant Catalogue

## For user research purposes the Energy Market Message Scenario Variant Catalogue is provided in Microsoft Excel file format in Annex D.

# Data Spec Microsoft Access Database

## For user research purposes the Data Specification is provided in Microsoft Access file format in Annex E.

1. The Data Spec comprises data governed under the SEC, REC, BSC, UNC, IUNC and DCUSA. [↑](#footnote-ref-2)
2. The Permissible Message Means Object Class defines the Physical Messaging Standard applicable for each Energy Market Message (see Paragraph 2.14 of this document). [↑](#footnote-ref-3)
3. Data Spec version 20.00.00 is published as a Microsoft Access database. [↑](#footnote-ref-4)
4. The meaning of Object Class is defined in ISO 11179 [↑](#footnote-ref-5)
5. The meaning of Data Element is defined in ISO 11179 [↑](#footnote-ref-6)
6. For example, the datatype format Boolean is related to two data type format rules, which support the requirements of different Physical Messaging Standards. [↑](#footnote-ref-7)
7. This includes the minus sign or decimal point characters for numeric Datatype Format. [↑](#footnote-ref-8)
8. This can be accessed via the DTS Portal. [↑](#footnote-ref-9)
9. This is currently provisioned via the Landmark Central Switching Development Portal. [↑](#footnote-ref-10)
10. This can be accessed via the Xoserve website. [↑](#footnote-ref-11)
11. To be developed by the service provider as a level 3 REC document [↑](#footnote-ref-12)
12. To be developed by the service provider as a level 3 REC document [↑](#footnote-ref-13)
13. To be developed by the service provider as a level 3 REC document [↑](#footnote-ref-14)
14. Market Scenarios will be developed by the Code Manager within the EMAR [↑](#footnote-ref-15)
15. E.g. A Message Scenario Variant Collection is defined as a Record within the UKLink Manual. [↑](#footnote-ref-16)
16. The Gas Enquiry Service Data Access Matrix will not be added until RCC. [↑](#footnote-ref-17)