MPRN Enquiry Web Service Guide

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Document Updates		
Date	**Description**	**Version**
16 Feb 2021	*Document introduced as part of Schema Release V13.0 (Smart)* *MCR 1135 MPRN Enquiry Webservice*	1.0
4 August 2021	*Document updated as part of Minor Market Release V13.1*	*1.1*
29th June 2022	*Updated in line with changes introduced for Interim Retail Market Microgeneration Solution (MCR1213).*	*1.2*
25 Feb 2021	Smart Phase 2 Initial Version – Updated to include PAYG Remote Re-Energisation request	*1.3*
28 May 2024	Updated to reflect MCR1189 addition of Service Removed flag	*1.4*

Table of Contents

1. Purpose of this Document

The purpose of this document is to communicate to market participants, the purpose, scope and functionality associated with the MPRN Enquiry Web Service. The application provides functionality to view MPRN Data, TMPRN Data and GMPRN Data.

This document should be read in conjunction with :
- o **MCR 1135 -** MPRN Enquiry web service

2. Purpose of MPRN Enquiry Web Service

The primary purpose of the MPRN Enquiry Web Service is to provide Suppliers with data associated with a particular MPRN, TMPRN or GMPRN and to facilitate the operation of a competitive electricity market. As per MCR1135 the MPRN web service and data associated is for the purpose of enhancing the ROI registration process, and to help with the accuracy and efficiencies of customers moving between Suppliers.

The application will allow Suppliers to:

o **View an MPRN** by retrieving data associated with that MPRN e.g. the Meter Point Address etc.
o **View a TMPRN** by retrieving data associated with that TMPRN e.g. the Meter Point Address etc.
o **View a GMPRN** by retrieving data associated with that GMPRN e.g. the Meter Point Address etc.

2.1   Access to the MPRN Enquiry Web Service

Access to the MPRN Enquiry Web Service will be restricted to authorised users of registered Supply companies, as detailed within the Access Agreement (ESB Networks Retail Electricity Market Access Systems). Users will access the MPRN Enquiry Web Service via a URL provided by ESB Networks.

The planned availability of the web service will be in line with that currently provided for the ROI RMP Extranet, i.e. the service will be available 24/7, with the exception of planned outages or unexpected issues impacting on the production Central Market Systems. Unlimited on demand information will not be available (e.g. unlimited web service calls per MPRN per 24hour period etc).
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2.2   Overview of Functionality

The MPRN Enquiry Web Service functionality will allow Suppliers to access meter point data in real time. Upon submitting an MPRN, TMPRN or GMPRN the MPRN Enquiry Web Service will retrieve a defined dataset of values from the Central Market System. There are eight sets of data, these are as follows:

o An MPRN with a status of E (energised) or D (de-energised) or DR (de-energised remote)
o An MPRN with a status of A (assigned)
o An unsuccessful MPRN enquiry
o A TMPRN with a status of E (energised) or D (de-energised)
o A TMPRN with a status of A (assigned)
o An unsuccessful TMPRN enquiry
o A successful GMPRN enquiry
o An unsuccessful GMPRN enquiry

The set of data associated with each scenario above is covered under Sections 3 to 5.

3. MPRN Enquiry

3.1 Overview of MPRN Enquiry

The purpose of the MPRN Enquiry option is to retrieve an MPRN dataset. The data presented will be based on the status or validity of the MPRN submitted. The suite of data presented is outlined in the next three sections.

3.2 MPRN Enquiry where the Status is E or D or DR

When a valid MPRN with a status E (energised) or D (de-energised) or DR (de-energised remote) is submitted the following data is returned:

MPRN
Name
UnitNo
HouseNo
AddressLine1
AddressLine2
Street
AddressLine4
AddressLine5
PostCode
City
County
Country
StandardProfile
MeteringClass
MeterConfigurationCode
EligibilityforQHMetering
MeterPointStatus
RegistrationStatus
ConnectionAgreement
TradingSiteFlag
EssentialPlant

DUoSGroup
MIC
MEC
ConnectionVoltage
ServiceRemoved
SSR1
SSR2
SSR3
SSR4
SSR5
SSR6
SSR7
SSR8
SSR9
SSR10
PSR1
PSR2
MED_INST
MeterLocation
LastActualReadDate
ReadCycleDay
NextReadDate
MeterCategory
SerialNumber
DateMeterInstalled
MeterRegisterSequence
Timeslot
RegisterType
Multiplier
PreDecimaldigits
PostDecimaldigits
DUoSBillingFrequencyCode
DuosBillingCycle
CommsTechnicallyFeasible
SmartNonParticipationCode

SmartDataServicesCode

3.3   MPRN Enquiry where the Status is A

When a valid MPRN with a status A (assigned) is submitted the following data is returned:

MPRN
Name
UnitNo
HouseNo
AddressLine1
AddressLine2
Street
AddressLine4
AddressLine5
PostCode
City
County
Country
StandardProfile
MeteringClass
MeterConfigurationCode
EligibilityforQHMetering
MeterPointStatus
MPRNAssignedOn
ContactTelNo
RegistrationStatus
ConnectionAgreement
TradingSiteFlag
EssentialPlant
DUoSGroup
MIC
MEC
ConnectionVoltage

SmartDataServicesCode

3.4   MPRN Enquiry where the data submitted is invalid

When an invalid MPRN is submitted the following data is returned:

MPRN
RejectReasonCode
ErrorMessage

4. TMPRN Enquiry

4.1.   Overview of TMPRN Enquiry

The purpose of the TMPRN Enquiry option is to retrieve a TMPRN dataset. The data presented will be based on the status or validity of the TMPRN submitted. The suite of data presented is outlined in the next three sectons.

4.2.   TMPRN Enquiry where the Status is E or D

When a valid TMPRN with a status E (energised) or D (de-energised) is submitted the following data is returned:

MPRN
GroupedMPRN
Name
UnitNo
HouseNo
AddressLine1
AddressLine2
Street
AddressLine4
AddressLine5
PostCode
City
County
Country
StandardProfile
MeteringClass
MeterConfigurationCode
MeterPointStatus
DUoSGroup
MIC
MEC
ConnectionVoltage
BurnHourCalendar
ReferenceNo

| RepetitionFactor |
| UnmeteredTypeCode |
| ActualWattage |
| BillableWattage |
| PowerFactor |

4.3.   TMPRN Enquiry where the Status is A

When a valid TMPRN with a status A (assigned) is submitted the following data is returned:

| MPRN |
| GroupedMPRN |
| Name |
| UnitNo |
| HouseNo |
| AddressLine1 |
| AddressLine2 |
| Street |
| AddressLine4 |
| AddressLine5 |
| PostCode |
| City |
| County |
| Country |
| StandardProfile |
| MeteringClass |
| MeterConfigurationCode |
| MeterPointStatus |
| DUoSGroup |
| MIC |
| MEC |
| ConnectionVoltage |
| BurnHourCalendar |
| ReferenceNo |

RepetitionFactor
UnmeteredTypeCode
ActualWattage
BillableWattage
PowerFactor

4.4. TMPRN Enquiry where the data submitted is invalid

When an invalid MPRN is submitted the following data is returned:

MPRN
RejectReasonCode
ErrorMessage

5. GMPRN Enquiry

5.1. Overview of GMPRN Enquiry

The purpose of the GMPRN Enquiry option is to retrieve a GMPRN dataset. The data presented will be based on the validity of the GMPRN submitted and will be specific to the individual GMPRN and will not include a list of associated TMPRNs. The suite of data presented for the individual GMPRN is outlined in the next two sections.

5.2. GMPRN Enquiry where the data submitted is valid

When a valid GMPRN is submitted the following data is returned:

MPRN
Name
UnitNo
HouseNo
AddressLine1
AddressLine2
Street
AddressLine4
AddressLine5
PostCode
City
County
Country
RegistrationStatus
ConnectionAgreement
EssentialPlant

5.3. GMPRN Enquiry where the data submitted is invalid

When an invalid GMPRN is submitted the following data is returned:

MPRN
RejectReasonCode
ErrorMessage

6. Appendix A - Data Descriptions

Field Name	Description
MPRN	The unique identifying reference for the Meter Point. Where an MPRN or TMPRN submitted via an MPRN Enquiry request has a status of Assigned, Energised or DeEnergised or De-energised Remote the associated data will be presented. Where an MPRN or TMPRN submitted via an MPRN Enquiry request is invalid the associated Reject Reason will be presented. Where a GMPRN submitted via an MPRN Enquiry request is valid the associated data will be presented. Where a GMRPN submitted via an MPRN Enquiry request is invalid the associated Reject Reason will be presented.
GroupedMPRN	The unique identifying reference for the Grouped Meter Point associated with a TMPRN.
Name	This field will be blank for Domestic Customers (DG1 & DG2) and will only be populated for non-domestic MPRN
UnitNo	This refers to the unit, flat or apartment number that can be part of an address
HouseNo	This is the number of the premises given as part of an address
AddressLine1	This field can be used as overflow for address details
AddressLine2	This field can be used as overflow for address details
Street	This field stores information relating to the street part of an address and must be provided if populating the street type address segment.
AddressLine4	This field can be used as overflow for address details
AddressLine5	This field can be used as overflow for address details
PostCode	This is the postal or Zip code given as part of an address where appropriate
City	Used to populate the details of which City an address is situated in, where appropriate.
County	This field provides a County in Ireland
Country	A field that makes up part of an address denoting in which country the address is situated.
StandardProfile	Load Profile is a code that determines, when coupled with Timeslot, the derived profile to be applied to the consumption for settlement.
MeteringClass	This code is used to indicate how a connection is billed (e.g. QH, NQH, HH, NHH or Unmetered).
MeterConfigurationCode	Meter Configuration Code is a code to indicate the functionality present in a meter at a site as required by the Supplier to be delivered by the combination of registers physically installed at a meter point. It does not describe the technical attributes of the meter(s).

EligibilityforQHMetering	Indicates if the connection is eligible for QH metering as per the current threshold values. (e.g. Yes or not populated where eligibility has not been determined)
MeterPointStatus	A code to identify the requested connection status of a meter point where the MPRN is Energised or DeEnergised or De-energised Remote or Assigned.
MPRNAssignedOn	The date that the MPRN was available on the Central Market System.
ContactTelNo	This is the phone number of the associated contact for the MPRN.
RegistrationStatus	This status indicates if the MPRN is registered to a Supplier (i.e. Registered or Unregistered)
ConnectionAgreement	Indicates if a Connection Agreement between ESB Networks and the Customer is in place, is outstanding or is being revised at the request of the customer. (e.g. Active (Connection Agreement in place) Or In Progress (Connection Agreement outstanding or revision in progress))
TradingSiteFlag	Where the site is recorded as a Trading Site a value of Yes is displayed. Else the data item will not be populated
EssentialPlant	Where the flag appears with a value of 1, it will mean that there is essential plant at this MPRN (i.e. Yes, or field not populated)
DUoSGroup	DUoS Group is a code which denotes the distribution use of system tariff applying to the MPRN.
MIC	Maximum Import Capacity of Site
MEC	Maximum Export Capacity of Site[1].
ConnectionVoltage	This is the voltage at the point of connection (e.g. LV, MV, 38kV, 110kV)
ServiceRemoved	This flag indicates whether service removal has occurred. It will contain a 'YES' value where the service has been removed at this MPRN and will be blank in all other instances.
SSR1	The code value for this field will be 0001 where valid for MPRN, signifying "Visually Impaired"
SSR2	The code value for this field will be 0002 where valid for MPRN, signifying "Speech Impaired"
SSR3	The code value for this field will be 0003 where valid for MPRN, signifying "Hearing Impaired"
SSR4	The code value for this field will be 0004 where valid for MPRN, signifying "Elderly"
SSR5	The code value for this field will be 0005 where valid for MPRN, signifying "Language Difficulty"

[1] UoM: kVA; leading zeroes omitted; MEC will be displayed as 16,7 (e.g. 123456789.1234567)

SSR6	The code value for this field will be 0006 where valid for MPRN signifying "Learning Difficulty"
SSR7	The code value for this field will be 0007 where valid for MPRN signifying "Mobility Impaired"
SSR8	The code value for this field will be 0008 where valid for MPRN signifying "Dexterity Impaired"
SSR9	The code value for this field will be 0009 where valid for MPRN signifying "Mental Health"
SSR10	The code value for this field will be 0010 where valid for MPRN signifying "Other"
PSR1	The PSR code values will only be provided if customer permission has been granted and where this has been advised by the Supplier. The code value for this field will be 0003 where valid for MPRN signifying "Life Support"
PSR2	The PSR code values will only be provided if customer permission has been granted and where this has been advised by the Supplier. The code value for this field will be 0004 where valid for MPRN signifying "Non-Life Support"
MED_INST	The code value for this field will be 0005 where valid for MPRN signifying "Medical Institute"
MeterLocation	Meter Location is the description of the physical position of a meter at a premises.
LastActualReadDate	Last Actual Read Date is the date on which a plausible read was last obtained for a Meter point.
ReadCycleDay	Read Cycle Day refers to the day in a 41 working day cycle (ROI) that a meter is due to be read.
NextReadDate	Indicates the next scheduled meter reading date for the given MPRN.
MeterCategory	Meter Category is a code allocated by Meter Asset Manager to denote the manufacturer and type of meter.
SerialNumber	Serial No is the physical number found on a meter.
DateMeterInstalled	Date Meter Installed Indicates the date that the meter was installed
MeterRegisterSequence	Meter Register Sequence is the identifier of a specific register to distinguish between registers dials on a physical meter or set of meters.
Timeslot	Timeslot is a code that indicates the period that a meter is recording (or an unmetered installation is consuming electricity).
RegisterType	Register Type is a code that indicates the purpose of the register.
Multiplier	Meter Multiplier is a factor to be applied to an advance or reading at a register in order to derive a value in kWh.

PreDecimaldigits	The number of digits before the decimal place on the register of a meter.
PostDecimaldigits	The number of digits after the decimal place on a register of a meter.
DUoSBillingFrequencyCode	Duos Billing Frequency is a code that indicates the frequency of Duos billing at the meter point.
DuosBillingCycle	Duos Billing Cycle Day refers to the day in a 41 working day cycle (ROI) that a Half Hourly meter is due to be Duos Billed.
CommsTechnicallyFeasible	Code to indicate to a supplier the feasibility of the Communications to the Smart meter
SmartNonParticipationCode	Code to identify Smart Non Participation details
SmartDataServicesCode	Code to identify Smart Data Services
BurnHourCalendar	Duration of burn hours
ReferenceNo	Street Light Reference Value
RepetitionFactor	Repetition Factor represents the number of pieces of equipment valid for this segment i.e. with the same Un-metered Type / Billing Value combination.
UnmeteredTypeCode	Codified field indicating the type of unmetered installation
ActualWattage	Equipment rated power demand
BillableWattage	Billable Wattage represents the total energy consumption including applicable adjustments
PowerFactor	This is a term used to describe the relationship between 'active/real' power (kW), 'reactive/wattless' power (kVAr), and 'apparent' power (kVA). Power factor is always 1 or less.
RejectReasonCode	This is the code returned for an invalid entry (refer to Appendix B for more details)
ErrorMessage	This is a description of the code returned for an invalid entry (refer to Appendix B for more details)

7. Appendix B - Reject Reason Codes and Error Messages

Reject Reason Code	Error Message	Sample Trigger
IID	Invalid/Incomplete data	Invalid MPRN format
IMP	Invalid MPRN	MPRN on the given request does not exist in the Central Market System

8. <u>Appendix C – Webservice Metadata</u>

MPRN Enquiry
Webservice Guide_V