# DIP MESSAGE SPECIFICATION

**Interface Name:** Data Refresh
**Interface / Pub ID:** IF-0XX / (PUB-0XX)
**Version Number:** 0.1

**DIP Delivery Pattern:** Pattern A (JSON via DIP)
**Security Category:** Cat 2
**Business Process Docs:** BP02 / BP03

**From Parties:** Registration Service (REGS)

**To Parties:** Electricity Enquiry Service (EES) ONLY

**Purpose / Description:** Flow from Registration Service to EES providing a 'refresh'of the current data position in the Registration Service

**Routing Rules**

| Event Code(s) / Conditions | Always Routing | Primary Routing | Secondary Routing | Correlation ID Created |
|---|---|---|---|---|
| [EESRefresh] | EES, MDS | | | |

**Message Structure**

| MHHSP Data Item ID | Data Item | Description | Item Owner | MHHSP Data Type Ref | Data Type | Schema Optionality | C/M/O | Conditionality Rule | Obfuscation | Population Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **S0- Transactional Info (Mandatory)** | | | | | | | | | | |
| DI-000 | Interface Id | Interface Id | Sending Party | DT-000 | String 8 | M | M | | | IF-0XX |
| DI-992 | Schema Version | The Scheme Version against which the message has been constructed | Sending Party | | String 10 | M | M | | | nnn |
| DI-999 | Event Code | Code used to identify the nature of the Event | Sending Party | DT-004 | String~50 | M | M | | | [EESRefresh] |
| **S1 - Sender Info (Mandatory)** | | | | | | | | | | |
| **D0- Transactional Info - DIP Set (Added by DIP - Mandatory)** | | | | | | | | | | |
| **A0 - Addressing (Optional for non-Primary Routing)** | | | | | | | | | | |
| **M0 - MPAN (Mandatory)** | | | | | | | | | | |
| DI-063 | MPAN Core | A business key used to uniquely identify the metering point that is the subject of the update. | Sending Party | DT-002 | String~13 | M | M | | | |
| DI-108 | Distributor DIP ID | The DIP ID of the distributor who is responsible for the distribution network that a metering point is connected to. | Registration Service | DT-006 | String 10 | M | M | | | |
| DI-037 | GSP Group ID | Identifies the distinct grid supply point group (physical region of the country) where the metering point is located. | Registration Service | | String~2 | M | M | | | |
| **B079 - Meter Point Registration Statuses (Mandatory)** | | | | | | | | | | |
| DI-130 | RMP Status (Registration) | The MPAN RMP Status as held in the Registration Service | Registration Service | | String 1 | M | M | | | C = Created<br>O = Operational<br>T = Terminated |
| DI-167 | RMP Status Effective From Date | The Effective From Date of MPAN RMP Status as held in the Registration Service | Registration Service | DT-003 | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| DI-131 | MP Status | The MP or Trading Status as held in the Registration Service | Registration Service | | String 1 | M | M | | | N= New<br>R = Registered<br>T = Traded<br>X = Disconnected |
| DI-168 | MP Status Effective From Date | The Effective From Date MP or Trading Status as held in the Registration Service | Registration Service | DT-003 | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **B080 - Green Deal Information (Mandatory if available in Registration Service)** | | | | | | | | | | |
| DI-111 | Green Deal Effective From Date | The date from which a Green Deal agreement is considered to be in place. | | DT-003N | String 25 | M | M | | | |
| DI-112 | Green Deal Effective To Date | The date to which a Green Deal agreement is considered to be in place. | | DT-003N | String 25 | M | M | | | |
| **B001 - GSP EffectiveFrom (Mandatory if available in Registration Service)** | | | | | | | | | | |
| DI-036 | GSP Group ID EffectiveFrom Date | The date and time from which the GSP Group ID is in effect for the metering system. | LDSO | DT-003 | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **B083 - Current Supplier (Mandatory if available in Registration Service)** | | | | | | | | | | |
| DI-218 | Current Supplier DIP ID | DIP of Current Supplier | Registration Service (ISD) | DT-006 | String 10 | M | M | | | |
| DI-219 | Current Supplier MPID | MPID of the Supplier Appointed at the point message was created by the Registration Service, i.e. the Currently Appointed Supplier | Registration Service (ISD) | | String 4 | M | M | | | |
| DI-086 | Supplier Effective From Date | Supply Start Date of the current Supplier | Registration Service | DT-003 | String 25 | M | M | | | |
| **B013 CSS Registration Request ID (Mandatory if available in Registration Service)** | | | | | | | | | | |
| DI-849 | CSS Registration Request ID | CSS Swich ID associated with a Supplier's Switch Request / resulting period of Supply | Supplier | | String 36 | M | M | | | |
| **B081 - Current Metering Service Details (Mandatory if available in Registration Service)** | | | | | | | | | | |
| DI-809 | Current Metering Service DIP ID | DIP ID of the Metering Service Appointed at the point message was created by the Registration Service, i.e. the Currently Appointed Metering Service | Registration Service | DT-006N | String 10 | M | C | If availible in Registration Service | | |
| DI-207 | Metering Service MPID | Metering Service MPID | | DT-027N | String 4 | M | C | If availible in Registration Service | | |
| DI-061 | Metering Service Effective From Date | The date and time from when a metering service will be responsible for a metering point. Initially assumed to be midnight UTC. | Registration Service | DT-003N | String 25 | M | C | If availible in Registration Service | | |
| **B082 - Current Data Service Details (Mandatory if available in Registration Service)** | | | | | | | | | | |
| DI-811 | Current Data Service DIP ID | DIP ID of the Data Service Appointed at the point message was created by the Registration Service, i.e. the Currently Appointed Data Service | Registration Service | DT-006N | String 10 | M | C | If availible in Registration Service | | |
| DI-208 | Current Data Service MPID | Data Service MPID | | DT-027N | String 5 | M | C | If availible in Registration Service | | |
| DI-023 | Data Service Effective From Date | The date and time from when a data service will be responsible for a metering point. Initially assumed to be midnight UTC. | Registration Service | DT-003N | String 25 | M | C | If availible in Registration Service | | |
| **B019 - Assigned MDR (Mandatory if available in Registration Service)** | | | | | | | | | | |
| DI-842 | Assigned MDR DIP ID | DIP ID of the MDR assigned to an MPAN | Smart Data Service (ISD) | DT-006 | String 10 | M | M | | | |
| DI-209 | Assigned MDR MPID | Assigned MDR MPID | Smart Data Service (ISD) | DT-027 | String 4 | M | M | | | |
| DI-844 | Assigned MDR EffectiveFrom Date | The Effective Date from which the MDR Effective Date to be recorded as in Registration and DCC | Smart Data Service | DT-003 | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **B020 - Customer Direct Contract MS Info ~ Mandatory where availible in Registration Service** | | | | | | | | | | |
| DI-140 | Customer Direct Contract Metering Service DIP ID | The DIP ID of the Metering Service that has recorded the existence of a Customer Direct Contract for that MPAN. | Metering Service | DT-006N | String 10 | M | M | | | |
| DI-145 | Customer Direct Contract Metering Service EffectiveTo Date | Date on which Customer Direct Contract Metering Service Ends | Metering Service | DT-003 | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **B021 - Customer Direct Contract DS Info ~ Mandatory where availible in Registration Service** | | | | | | | | | | |
| DI-138 | Customer Direct Contract Data Service DIP ID | The DIP ID of the Data Service that has recorded the existence of a Customer Direct Contract for that MPAN. | Data Service | DT-006N | String 10 | M | M | | | |

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| DI-146 | Customer Direct Contract Data Service EffectiveTo Date | Date on which Customer Direct Contract Data Service Ends | Data Service | DT-003 | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **B022 - MPAN Address (Mandatory)** | | | | | | | | | | |
| DI-010 | Metering Point Postcode | The full postcode of the metering point site. | LDSO | DT-007N | String 10 | M | O | | | |
| DI-001 | Address Line 1 | A component of a metering point site address. There are defined parts of the address for each address line. | LDSO | DT-001N | String 40 | M | O | | | |
| DI-002 | Address Line 2 | A component of a metering point site address | LDSO | DT-001N | String 40 | M | O | | | |
| DI-003 | Address Line 3 | A component of a metering point site address | LDSO | DT-001N | String 40 | M | O | | | |
| DI-004 | Address Line 4 | A component of a metering point site address | LDSO | DT-001N | String 40 | M | O | | | |
| DI-005 | Address Line 5 | A component of a metering point site address | LDSO | DT-001N | String 40 | M | O | | | |
| DI-006 | Address Line 6 | A component of a metering point site address | LDSO | DT-001N | String 40 | M | O | | | |
| DI-007 | Address Line 7 | A component of a metering point site address | LDSO | DT-001N | String 40 | M | O | | | |
| DI-008 | Address Line 8 | A component of a metering point site address | LDSO | DT-001N | String 40 | M | O | | | |
| DI-009 | Address Line 9 | A component of a metering point site address | LDSO | DT-001N | String 40 | M | O | | | |
| **B023 - MPAN Connection Info (Mandatory)** | | | | | | | | | | |
| DI-015 | Connection Type Indicator | A code to indicate the type of connection at the metering point. | LDSO | | String 1 | M | M | | | W - Whole Current<br>L - LV with CT<br>H - HV with CT<br>E - EHV with CT<br>U - Unmetered |
| DI-016 | Connection Type Effective FromDate | The date and time from which the metering point Connection Type is in effect. | LDSO | DT-003 | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| DI-035 | Energy Direction | Indicates the direction of energy at a metering point. Values can be I = import / E = export. | LDSO | | String 1 | M | M | | | I = Import<br>E = Export |
| DI-127 | Metered Indicator | An indicator to show whether the Consumption Component is for a metered supply or unmetered supply. | LDSO | | Boolean | M | M | | | False = U - Unmetered,<br>True = M - Metered |
| **B024 - MPAN DUOS Tariff ID (Mandatory)** | | | | | | | | | | |
| DI-128 | DUOS Tariff ID | Reference to identify the DUoS Tariff assigned to an MPAN | LDSO | | String 3 | M | M | | | |
| DI-129 | DUOS Tariff ID EffectiveFrom Date | Date on which DUoS Tariff came into effect | LDSO | DT-003 | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **B025 - MPAN Energisation Status (Mandatory)** | | | | | | | | | | |
| DI-033 | Energisation Status | Indicates if the metering point is considered energised (i.e. connected to the distribution system) and therefore active for settlement purposes. | Metering Service | | String 1 | M | M | | | D - De-Energised<br>E - Energised |
| DI-034 | Energisation Status Effective From Date | The settlement date and time from which an energisation status is in effect for a metering system. | Metering Service | DT-003 | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **B026 - MPAN Market Segment (Mandatory)** | | | | | | | | | | |
| DI-050 | Market Segment Indicator | An enumeration of Smart/Advanced/Unmetered. | Registration Service | | String 1 | M | M | | | S = Smart/Traditional<br>A = Advanced<br>U = Unmetered |
| DI-051 | Market Segment Indicator Effective From Date | The date from which the metering point Market Segment is in effect. | Registration Service | DT-003 | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **B027 - Assumed Annual Consumption (Mandatory - if available in Regsitration)** | | | | | | | | | | |
| DI-148 | Annual Consumption | ECS Calculated Annual Consumption (kWh) | MDS | DT-016 | String 13 | M | M | | | eg. 123456789.123 |
| DI-149 | Annual Consumption EffectiveFrom Date | Date on which Assumed Annual Consumption was Calculated/is Effective From | MDS | DT-003 | String 25 | M | M | | | |
| DI-150 | Annual Consumption Quality Indicator | Assumed Annual Consumption Quality Indicator | MDS | | String 1 | M | M | | | A= 100% Actual data<br>1 = > 75% Actual data<br>2 = <75% Actual data<br>3 = 100% Estimated data#<br>4 = > 50% no data<br>5 = < 50% no data<br>D= Default |
| **B028 - Domestic Premise Indicator (Mandatory)** | | | | | | | | | | |
| DI-030 | Domestic Premise Indicator | A flag that indicates if the MPAN of the registration appointment is used to identify a domestic premise. | Registration Service (ISD) | ~ | Boolean | M | M | | | T= True (Domestic)<br>F= False (Non-Domestic) |
| DI-032 | Domestic Premise Indicator Effective From Date | The date from which the metering point Domestic Premise Indicator is in effect. | Registration Service | DT-003 | String~25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **B029 - DCC Enrolment Status ((Mandatory where available In Registration Service)** | | | | | | | | | | |
| DI-025 | DCC Service Flag | A DCC provided flag to indicate the status of the services being provided by the DCC to a Metering Point. | LDSO | | String 1 | M | M | | | A = Active<br>I = Installed Not Commissioned<br>N = Non-Active |
| DI-026 | DCC Effective From Date (DCCF) | The first inclusive calendar date for which the status of the DCC Service flag applies. | LDSO | DT-003N | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **B030 - MPAN IHD Information (Mandatory where available In Registration Service)** | | | | | | | | | | |
| DI-137 | IHD Install Status | Information regarding the In Home Display at a metering point. | Supplier | | String 1 | M | M | | | I = Installed<br>D = Declined<br>E = Existing<br>F = Failed |
| DI-136 | IHD Status Effective From Date | The first inclusive calendar date that an a notable IHD status was provided. | Supplier | DT-003 | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **B031 - SMSO Info (Mandatory where available In Registration Service)** | | | | | | | | | | |
| DI-134 | SMSO (Smart Metering System Operator) | The Id of the operator a Supplier has procured data and communication services from in respect of a Metering System (applies only to certain types of SMETS1 Metering). | Supplier | | String 4 | M | M | | | |
| DI-135 | SMSO EffectiveFrom Date | The first inclusive calendar date that a Smart Metering System Operator ID is the provider of communications services to a Metering System (applies only to certain types of SMETS1 Metering). | Supplier | DT-003 | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **B032 - MPAN Legacy Info (Mandatory where available In Registration Service)** | | | | | | | | | | |
| DI-122 | Profile Class | A legacy classification, maintined by Suppliers, retained soley to assist with the undertsading of allocation of gross consumption to individual Settlement Periods. | Supplier (ISD) | | String 2 | M | C | Mandatory where availible to Registration Service | | |
| DI-124 | Profile Class Effective From Date | The Date from which the current Profile Class became Effective | Registration Service | DT-003N | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| DI-123 | SSC | A legacy classification, maintined by Suppliers, retained soley to assist with the undertsading of allocation of gross consumption to individual Settlement Periods. | Supplier (ISD) | | String 4 | M | C | Mandatory where availible to Registration Service | | |
| DI-125 | SSC Effective From Date | The Date from which the current Profile Class became Effective | Registration Service | DT-003N | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **B905 - B074 and B075 Blocks below are repeated for each-Meter held at Registration Service** | | | | | | | | | | |
| **B074 - Existing MPAN Meter Details (Mandatory if Metering Installed)** | | | | | | | | | | |
| DI-056 | Meter ID | Serial number of the physical meter. | Metering Service | DT-029 | String 10 | M | M | | | MSID for the 'existing' or 'newly installed' meter depending on Event type |
| DI-059 | Meter Type | The type of meter, in relation to its capabilities. E.g. AMR.S1, S2, S2ADE | Metering Service | | String 5 | M | M | | | Values as per ISD |
| DI-048 | Meter Manufacturer | The Meter Manufacturer Code. | Metering Service | | String 60 | M | O | | | |
| DI-085 | Electricity Smart Meter Equipment (ESME ID) | The Electricity Smart Meter Equipment GUID is the unique identifier for a Smart electricity This is also known as the DCC GUID and is further defined within the DCC interface specifications. | Metering Services | | String 23 | M | C | Mandatory for Smart Meters | | (XX-XX-XX-XX-XX-XX-XX-XX) |

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| DI-090 | Meter Location | The actual location of the metering system within the site | Metering Service | | String 1 | M | M | | | Values as Per Data Catalogue |
| DI-091 | Number of Displayed Register Digits | The number of digits prior to the decimal point displayed by the total cumulative register of a smart meter | Metering Service | | Integer 1 | M | C | Mandatory for SMETS2 Meters | | Where the Meter Type is S1 the Number of Displayed Register Digits value must be be per the manufacturer's specification<br><br>Where the Meter Type is S2A, S2AD, S2ADE, 2ADF, 2ADEF, 2AEF, 2AF, S2B, S2BD, S2BDE, 2BF,2BDF, 2BDEF or 2BEF the value must be "5".<br><br>Where the Meter Type is prefixed with "S2C" the value must be "6".<br><br>Where the Meter Type is 2CDEF, 2CF, 2CDF or 2CEF the value must be "6" |
| DI-057 | Meter Installation Date/Time | The date of installation for a meter at a metering point. | Metering Service | DT-003 | String 25 | M | M | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| DI-058 | Meter Removal Date/time | The date when the meter was removed from a metering point. | Metering Service | DT-003N | String 25 | M | O | | | YYYY-MM-DDTHH:MM.SS±TZH:TZM |
| **> B075 - Meter MAP Info - Most Recent Record only for each B074 Meter provided above where availible in Registration Service** | | | | | | | | | | |
| DI-055 | Meter Asset Provider ID | The market-wide reference for the provider of the meter equipment. | Metering Service | | String 4 | M | M | | | Must be a valid set as per ISD |
| DI-054 | Meter Asset Provider Effective From Date | The inclusive calendar date from which the meter asset provider is in effect for the metering system. | Metering Service | DT-003 | String 25 | M | M | | | Must be a valid date and time |
| B035 block below are repeated for each Linked Import/Export MPAN | | | | | | | | | | |
| **B035 - Linked Import / Export MPAN (Mandatory if Linked MPAN Exists)** | | | | | | | | | | |
| DI-038 | Linked Import/Export MPAN | When this metering point is part of an import/export pair, this identifies the related import or export metering point. Where more than one import MPAN exists, this shall be populated with the Primary Import MPAN. | LDSO | DT-002 | String~13 | M | M | | | This field is mandatory, but will be Null/Blank if no linkage exists. |
| DI-151 | Linked MPAN Energy Direction | Energy Direction of the Linked MPANs | LDSO | | String 1 | M | M | | | I = Import<br>E= Export |
| DI-801 | Import/Export MPAN Supplier DIP ID | DIP ID of the Supplier Responsible for the Linked MPAN | Registration Service | DT-006N | String 10 | M | C | Mandatory if available in Registration Service | | |
| DI-212 | Import/Export MPAN Supplier MPID | Import/Export MPAN Supplier MPID | Registration Service (ISD) | DT-027N | String 4 | M | C | Mandatory if available in Registration Service | | |
| B037 block below are repeated for each Related MPAN, where Related MPAN(s) exist | | | | | | | | | | |
| **B037 - Related MPAN(s) (Mandatory where available In Registration Service)** | | | | | | | | | | |
| DI-075 | Primary MPAN | The primary in a related MPAN relationship. The primary is associated with the base load settlement configuration (contains no value, if not part of related MPAN pair). | Registration Service | DT-002N | String 13 | M | C | Either Or should be populated where MPAN (DI-063 above) is part of a group of Related MPANs<br><br>"B037" should be repeated for each Related MPAN | | |
| DI-079 | Secondary MPAN | The secondary in a related MPAN relationship. | Registration Service | DT-002N | String 13 | M | C | | | |

**Interface Notes**

The purpose of this message is to allow EES/MDS/DIP to be 'refreshed' with the latest data position as held in the Registration Services. It is not expected that this flow will be used as part of BAU activity, but in response to a data integrity/ misalignment issue arising as a result of an operational incident.

The Registration Service, EES, MDS and DIP will manage between them when use of the file is required, what MPAN(s) should be included in the file and whether or not the DIP is used to exchange the file or if another site-to-site mechanism is required (e.g. in cases when the DIP may not be availible or the volumes of data too large). If being exchanged via the DIP, then a standard Common Block element would be required for each Refreshed MPAN.

For data items with an Effective From Data eg. SMSO, GSP, IHD, SSC and where there is a future dated change held at the Registration Service, then the file should be populated with that future dated change(s) (as apose to the current value).

Suppliers, Service Providers and other participants do not need to receive or process this message - it is expected that they will reference the EES using the BAU EES API transactions where checking or realignment of data is required.

**Validation Rules**

The DIP will perform L1/L2 Validation - includes messages containing invalid allowable values (but not combinations of values).
The receiving party should perform Level 3/4 Validation rules as appropriate.
L3/L4 Validation should reject invalid or unknown MPANs