MHHS PROGRAMME
Industry-led, Elexon facilitated

MHHS INTERFACE / MESSAGE SPECIFICATION

Interface Name: EES Data Refresh
Interface / Pub ID: IF-051 / (PUB-051)
Version Number: '009

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) Marketwide Data Service (MDS)

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-051
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	Registrable Measurement Point (RMP) Status	The MPAN RMP Status as held in the Registration Service	Registration Service		String 1	M	M			C = Created O = Operational 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	MPAN Status	The MP or Trading Status as held in the Registration Service	Registration Service		String 1	M	M			N= New R = Registered T = Traded 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 SMRS)										
DI-111	Green Deal Effective From	The date and time from which a Green Deal exists.		DT-003N	String 25	M	M			
DI-112	Green Deal Effective To	The date and time to which a Green Deal exists.		DT-003N	String 25	M	M			
B001 - GSP EffectiveFrom (Mandatory if available in SMRS)										
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
B085 - Current Supplier (Mandatory if available in SMRS)										
DI-218	Current Supplier DIP ID	Current Supplier DIP ID	Registration Service (ISD)	DT-027	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)	DT-027	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 SMRS)										
DI-849	CSS Registration ID	The CSS identifier associated with a Supplier's Registration	Supplier		String 36	M	M			
B081 - Current Metering Service Details (Mandatory if available in SMRS)										
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	Current Metering Service MPID	Metering Service MPID		DT-027N	String 4	M	C	If availible in Registration Service		
DI-061	Metering Service EffectiveFrom Date	The date and time from when a metering service will be responsible for a metering point.	Registration Service	DT-003	String 25	M	C	If availible in Registration Service		
B082 - Current Data Service Details (Mandatory if available in SMRS)										
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-003	String 25	M	C	If availible in Registration Service		
B019 - Assigned MDR (Mandatory if available in SMRS)										
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	Date and time from which the from which an MDR is effective for an MPAN	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 SMRS										
DI-140	Customer Direct Contract MS 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 MS 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 SMRS										
DI-138	Customer Direct Contract DS 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			
DI-146	Customer Direct Contract DS EffectiveTo Date	The date and time on which an existing Data Service Customer Direct Contract is due to expire	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 free format character string for address details for a Metering Point for line 1 of the address.	LDSO	DT-001N	String 40	M	O			
DI-002	Address Line 2	A free format character string for address details for a Metering Point for line 2 of the address.	LDSO	DT-001N	String 40	M	O			
DI-003	Address Line 3	A free format character string for address details for a Metering Point for line 3 of the address.	LDSO	DT-001N	String 40	M	O			
DI-004	Address Line 4	A free format character string for address details for a Metering Point for line 4 of the address.	LDSO	DT-001N	String 40	M	O			
DI-005	Address Line 5	A free format character string for address details for a Metering Point for line 5 of the address.	LDSO	DT-001N	String 40	M	O			
DI-006	Address Line 6	A free format character string for address details for a Metering Point for line 6 of the address.	LDSO	DT-001N	String 40	M	O			
DI-007	Address Line 7	A free format character string for address details for a Metering Point for line 7 of the address.	LDSO	DT-001N	String 40	M	O			
DI-008	Address Line 8	A free format character string for address details for a Metering Point for line 8 of the address.	LDSO	DT-001N	String 40	M	O			
DI-009	Address Line 9	A free format character string for address details for a Metering Point for line 9 of the address.	LDSO	DT-001N	String 40	M	O			
B023 - MPAN Connection Info (Mandatory)										
DI-015	Connection Type	A code to indicate the type of connection.	LDSO		String 1	M	M			W - Whole Current L - LV with CT H - HV with CT E - EHV with CT U - Unmetered
DI-016	Connection Type Effective From Date	The date and time from which the Connection Type is in effect.	LDSO	DT-003	String 25	M	M			YYYY-MM-DDTHH:MM.SS±TZH:TZM
DI-035	Direction of Energy Flow	A bi-state Data Item indicating the direction of 'Active' power flow (i.e. whether the energy flow is import or export). Energy consumption is (Active) Import or Embedded Exempt Generation is (Active) Export.	LDSO		String 1	M	M			I = Import 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	B			False = U - Unmetered, 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 Effective From 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 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 A = Advanced U = Unmetered
DI-051	Market Segment Indicator Effective From Date	The date and time 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 SMRS)										
DI-148	Annual Consumption	Calculated Annual Consumption (kWh)	MDS	DT-016	String 14	M	M			eg. 123456789.123
DI-149	Annual Consumption Effective From Date	The date and time on which the Annual Consumption was calculated/is effective from	MDS	DT-003	String 25	M	M			

DI-150	Annual Consumption Quality Indicator	Calculated Annual Consumption Quality Indicator	MDS		String 1	M	M			A= 100% Actual data 1 = > 75% Actual data 2 = <75% Actual data 3 = 100% Estimated data# 4 = > 50% no data 5 = < 50% no data D= Default
B028 - Domestic Premise Indicator (Mandatory if Available)										
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) F= False (Non-Domestic)
DI-032	Domestic Premise Indicator Effective From Date	The date and time 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 SMRS)										
DI-025	DCC Service Flag	A flag indicating the status of services being provided by the DCC for the metering point	LDSO		String 1	M	M			A = Active I = Installed Not Commissioned N = Non-Active
DI-026	DCC Effective From Date	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 SMRS)										
DI-137	In Home Display (IHD) Install Status	Information from the Supplier regarding the In Home Display at a metering point.	Supplier		String 1	M	M			I = Installed D = Declined E = Existing F = Failed
DI-136	IHD Status Effective From Date	The date and time from which a supplier provided a notable IHD status.	Supplier	DT-003	String 25	M	M			YYYY-MM-DDTHH:MM.SS±TZH:TZM
B031 - SMSO Info (Mandatory where available In SMRS)										
DI-134	Smart Metering System Operator (SMSO)	The Id of the operator a Supplier has procured data and communication services from in respect of a Metering System	Supplier		String 4	M	M			
DI-135	SMSO Effective From Date	The date and time from which a Smart Metering System Operator ID is the provider of communications services to a Metering System	Supplier	DT-003	String 25	M	M			YYYY-MM-DDTHH:MM.SS±TZH:TZM
B032 - MPAN Legacy Info (Mandatory for Traditional Meters / Optional for other Meters OR where not available in SMRS)										
DI-122	Profile Class Id	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 for Traditional Meters		
DI-124	Profile Class Effective From Date	The date and time from which the current Profile Class became Effective	Registration Service	DT-003N	String 25	M	C	Required if [DI-122] not null		YYYY-MM-DDTHH:MM.SS±TZH:TZM
DI-123	Standard Settlement Configuration (SSC) Id	A legacy classification, retained solely to assist with the allocation of gross consumption to individual Settlement Periods.	Supplier (ISD)		String 4	M	C	Mandatory for Traditional Meters		
DI-125	SSC Effective From Date	The date and time from which the current SSC became Effective	Registration Service	DT-003N	String 25	M	C	Required if [DI-123] not null		YYYY-MM-DDTHH:MM.SS±TZH:TZM
B914 - B086 and B075 Blocks below are repeated for each Meter held at SMRS										
> B086 - MPAN Existing Meter Information (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	Indicates the type of meter	Metering Service		String 5	M	M			Values as per ISD
DI-048	Manufacturers Make and Type	The manufacturer's make, name, and type number of a Meter	Metering Service		String 60	M	O			
DI-085	Electricity Smart Meter Equipment (ESME ID)	The Smart Device ID for a smart meter. 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)
DI-090	Meter Location	The actual location of the metering system within the site	Metering Service		String 1	M	M			Values as Per Energy Market Data Specification
DI-091	Number of Register Digits	Number of digits/dials to the left of the decimal point, of the Cumulative Register.	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 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”. Where the Meter Type is prefixed with “S2C” the value must be “6”. Where the Meter Type is 2CDEF, 2CF, 2CDF or 2CEF the value must be “6”
DI-057	Meter Installation Date / Time	The date and time 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 and time 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 B086 Meter provided above where available in SMRS										
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 date and time from which the meter asset provider is in effect for a 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	Associated Import / Export MPAN	When this metering point is part of an import/export pair, this identifies the related import OR export metering point	LDSO	DT-002	String 13	M	M			This field is mandatory, but will be Null/Blank if no linkage exists.
DI-151	Aassociated MPAN Energy Direction	Energy Direction of the Linked MPANs	LDSO		String 1	M	M			I = Import E= Export
DI-801	Import/Export MPAN Supplier DIP ID	DIP ID of Supplier responsible for Associated Import/Export 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 SMRS)										

DI-075	Primary MPAN	Primary MPAN to which a Secondary MPAN is linked as part of a group of Related MPANs	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 "B037" should be repeated for each Related MPAN		
DI-079	Secondary MPAN	Secondary MPAN	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