|  |  |  |
| --- | --- | --- |
| MHHS – Architecture Working Group | | |
| deliverable | | Registration Interface (R1: Registration Service to MSS) Specification |
| Owner | AWG (all members) | |
| Classification | | Public |
| Review date | | 11 March 2020 |
|  | |  |

There are three distinct[[1]](#footnote-1) registration data flows within this logical interface.

1. Flow 1: Registration Data (temporal master data)
2. Flow 2: Metering point Appointment (assignment) Data
3. Flow 3: Rejection and/or Error Data (returned to the Registration Service)

# Conceptual Data Model



One registration service must *provide details* for zero or many meters.

Every meter must be *owned* by only one registration service.

Every meter must *supply data* to only one metering service.

One metering service must *manage data* from zero or many meters.

# Flow 1 – Registration Data

## Overview

|  |  |
| --- | --- |
| Item | Description |
| Interface: | Registration Data to Meter Services (Smart) |
| Data Source: | Registration Service |
| Source Data Owner: | Who are the owners of the source data (for governance)? |
| Target: | Metering Service Smart |
| Target Data Owner: | Who are the owners of the target data? |
| Business Condition: | Change of registration details |
| Business Context: | Registration details provide the static reference/master data information for an electricity metering point. Registration data, valid at a point in time, is always applicable to meter readings/consumption data which occurred at that same time. |

## Transport Details

|  |  |
| --- | --- |
| Item | Description |
| Triggered By: | Change to any data item |
| Frequency: | Event driven |
| Typical Volume: |  |
| Max Volume: |  |
| Max Size: |  |
| Transport Timing: |  |
| Delivery Receipt: | Yes (default) |
| Idempotent: | Yes (default) |
| Sender meta-data: | Sender identification  Record type (create/update/delete) |
| Technical meta-data: | Use only self-describing (machine readable) formats.  Use XSD for XML. Use JSON schema for JSON. |
| Profile meta-data |  |

## Content & Data Catalogue

|  |  |  |
| --- | --- | --- |
| Data Item | Description | Classification |
| MPAN Core | Business key to uniquely identify a physical metering point. | PII (restricted) |
| GSP Group |  | Public |
| Distributor |  | Public |
| Supplier MPID |  | Public |
| Supplier EFD |  | Public |
| Market Segment ID |  | Public |
| Data Service MPID |  | Public |
| Data Service EFD |  | Public |
| Measurement Quantity |  | Public |
| Domestic |  | Public |
| Load Shape Category |  | Public |
| Whole Current or CT |  | Public |
| Metering Service MPID |  | Public |
| Metering Service EFD |  | Public |
| Line Loss Factor |  | Public |
| Line Loss Factor Class |  | Public |
| Opt Out Flag |  | public |

## SPAR Assessment

|  |  |
| --- | --- |
| Impact Type | Risk Impact Level |
|  |  |

## Security

|  |  |
| --- | --- |
| Item | Description |
| Security Role: | Registration Service Can distribute Flow 1 |
| Role Permissions: | Create and send data. |
| Privacy Classification: | Restricted. |
| GDPR: | MPAN Core. |
| In Transit Encryption: | Yes. |
| Message Encryption: | No. |
| Key Management: | Transport level key/certificates |

# Flow 2 – Appointment Data

## Overview

|  |  |
| --- | --- |
| Item | Description |
| Interface: | Registration Data to Meter Services (Smart) |
| Data Source: | Registration Service |
| Source Data Owner: |  |
| Target: | Metering Service Smart |
| Target Data Owner: |  |
| Business Condition: | Meter installation  Change of registration  Change of other agent appointment |
| Business Context: | To notify a Metering Service (smart) of their appointment or de-appointment to a metering system. |

## Transport Details

|  |  |
| --- | --- |
| Item | Description |
| Triggered By: | Metering system appointment events |
| Frequency: | Event driven. |
| Typical Volume: |  |
| Max Volume: |  |
| Max Size: |  |
| Transport Timing: |  |
| Delivery Receipt: | Yes (default) |
| Idempotent: | Yes (default) |
| Sender meta-data: | Sender identification  Record type (create/update/delete) |
| Technical meta-data: | Use only self-describing (machine readable) formats.  Use XSD for XML. Use JSON schema for JSON. |
| Profile meta-data |  |

## Content & Data Catalogue

|  |  |  |
| --- | --- | --- |
| Data Item | Description | Classification |
| MPAN Core | Business key to uniquely identify a physical metering point. | PII (restricted) |
| MPID | The market participant Identifier that is being assigned responsibility for the meter. | Public |
| Metering Service EFD | The business date (inclusive) when the appointment takes effect and the MPID has responsibility for the meter. | Public |
| Metering Service ETD | The last business date (inclusive) at which this MPID has responsibility for the meter. | Public |
| Reason |  | Public |
| Supplier MPID |  | Public |
| Supplier EFD |  | Public |
| Supplier ETD |  | Public |

## SPAR Assessment

|  |  |
| --- | --- |
| Impact Type | Risk Impact Level |
|  |  |

## Security

|  |  |
| --- | --- |
| Item | Description |
| Security Role: | Registration Service Can distribute Flow 2 |
| Role Permissions: | Create and send data. |
| Privacy Classification: | Restricted. |
| GDPR: | MPAN Core. |
| In Transit Encryption: | Yes. |
| Message Encryption: | No. |
| Key Management: | Transport level key/certificates |

# Flow 3 – rejection/error Data

## Overview

|  |  |
| --- | --- |
| Item | Description |
| Interface: | Rejection and/or Error data being returned to the registration service |
| Data Source: | Metering Service Smart (MSS) |
| Source Data Owner: |  |
| Target: | Registration Service |
| Target Data Owner: |  |
| Business Condition: | Response to any business condition from Flow 1 & Flow 2. |
| Business Context: | Response following the processing of the appointment flow when the requested appointment is rejected by the MSS. |

## Transport Details

|  |  |
| --- | --- |
| Item | Description |
| Triggered By: | Data processing issue. |
| Frequency: | Event driven. |
| Typical Volume: |  |
| Max Volume: |  |
| Max Size: |  |
| Transport Timing: |  |
| Delivery Receipt: | Yes (default) |
| Idempotent: | Yes (default) |
| Sender meta-data: | Sender identification  Record type (error or rejection) |
| Technical meta-data: | Use only self-describing (machine readable) formats.  Use XSD for XML. Use JSON schema for JSON. |
| Profile meta-data |  |

## Content & Data Catalogue

|  |  |  |
| --- | --- | --- |
| Data Item | Description | Classification |
| MPAN Core | Business key to uniquely identify a physical metering point. | PII (restricted) |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## SPAR Assessment

|  |  |
| --- | --- |
| Impact Type | Risk Impact Level |
|  |  |

## Security

|  |  |
| --- | --- |
| Item | Description |
| Security Role: | MSS Can distribute Flow 3 |
| Role Permissions: | Create and send data. |
| Privacy Classification: | Restricted. |
| GDPR: | MPAN Core. |
| In Transit Encryption: | Yes. |
| Message Encryption: | No. |
| Key Management: | Transport level key/certificates |

1. As identified by the CCDG [↑](#footnote-ref-1)