

# Single Market Platform API

October 2025

**Version 1.08**

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## Introduction

This document aims to provide a closer look at the APIs the National Energy System Operator (NESO) offers to enable access to the GB Single Market Platform (SMP) for Market Participants, via the Single Market Platform Application Programming Interface (SMP API). The SMP API provides a potentially more efficient way for Market Participants to interact with the SMP.

This document aims to provide Market Participants with:

- An understanding of what is required to interact with the SMP API
- An overview of the APIs published by the SMP API

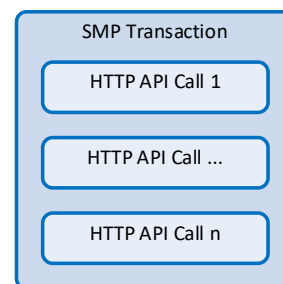
## Further information

More information about the Single Market Platform, including the SMP API, is available on the [Single Market Platform](#) page of the NESO website.

To discuss opportunities offered by Single Market Platform and the SMP API, please contact NESO via your account manager or email [Commercial.Operation@neso.energy](mailto:Commercial.Operation@neso.energy)

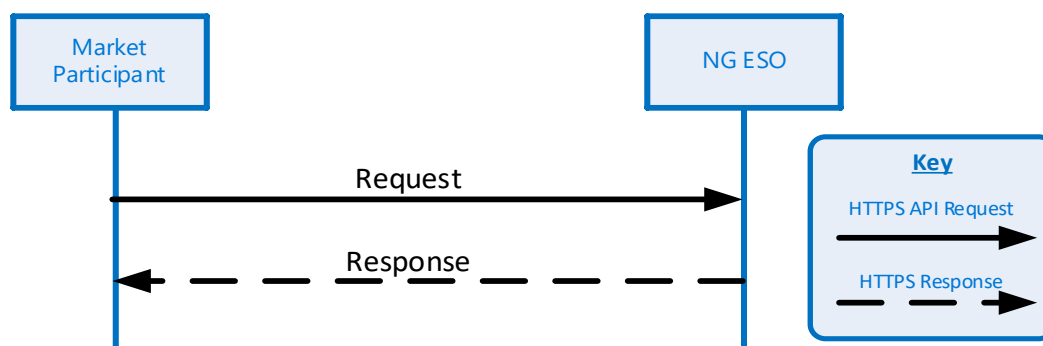
## Overview

Transactions with the SMP API may be synchronous or asynchronous<sup>1</sup> and are made up of one or more HTTPS API Calls (All asynchronous transactions will be composed of an assembly of synchronous API calls) While a limited number of these HTTPS API calls will be initiated by NESO, the majority will be initiated by the Market Participant.



## Transaction Patterns

### Synchronous SMP API Transaction



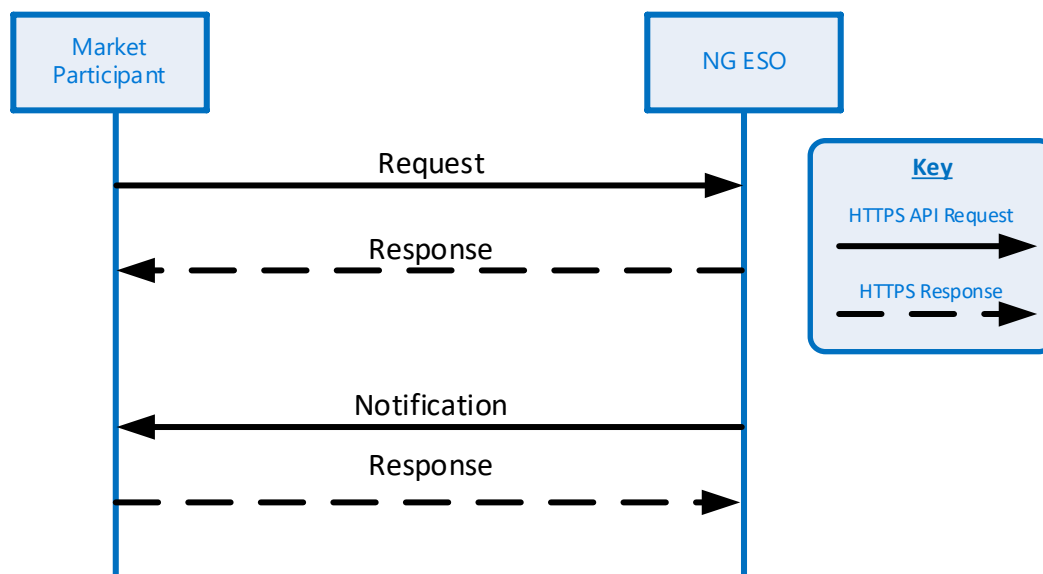
Synchronous SMP API Transactions will return the results of the requested transaction in the return payload of the HTTPS Call. The flows of information in this case will generally be:

- Market Participant initiates the transaction using an HTTPS API Request
- NESO processes the transaction
- NESO returns the results of the transaction in the response payload for the HTTPS API Call.

---

<sup>1</sup> An Asynchronous Transaction may be long running, so results of such a transaction are unlikely to be immediately available

## Asynchronous SMP API Transaction

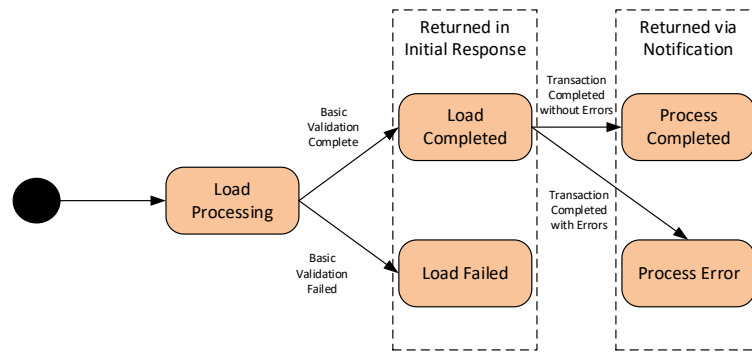


Asynchronous SMP API Transactions will return the results of the requested transaction in a notification, and Transaction State will be updated as the request progresses. The flows of information in this case will generally be along the format of:

- Market Participant initiates the transaction using an HTTPS API Request
- NESO validates the transaction request
- In the return HTTPS payload, NESO provides a Transaction ID and either indicates via Transaction State whether the transaction has been accepted (“Load Completed” or rejected (“Load Failed”) for further processing. In the event of a “Load Failed” being issued, the issues in the request should be resolved and a new request made.
- If NESO accepts the transaction,
  - After a period, NESO will initiate an HTTPS API call to the Market Participant with the transaction results. The Transaction State at this time be either “Process Completed” if no issues were found, or “Process Error” if issues were encountered.
  - The Market Participant is expected to acknowledge receipt of the transaction results with an HTTPS 200 OK message.

The Market Participant can query the state of a transaction at any time after the TransactionID has been issued using the Get Transaction Status API.





**Diagram: Transaction States**

## Available SMP Transactions

| Transaction         | Type         | Purpose                                                             | Pre-requisites                         | Associated API Calls                                |
|---------------------|--------------|---------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------|
| <b>Authenticate</b> | Sync         | Request an Authentication Token                                     | None                                   |                                                     |
| <b>Manage Asset</b> | Sync & Async | Create new Asset(s) in SMP                                          | Must have a valid authentication Token | Create Asset<br>Notification<br>GetTransactionState |
| <b>Read Asset</b>   | Sync         | Get details of Assets owned or managed by the user's account in SMP | Must have a valid authentication Token | Select Asset                                        |
| <b>Manage Unit</b>  | Sync & Async | Create a new Unit in SMP                                            | Must have a valid authentication Token | Create Unit<br>Notification<br>GetTransactionState  |

|                                     |              |                                                                                                         |                                        |                                                                     |
|-------------------------------------|--------------|---------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------|
| <b>Read Unit</b>                    | Sync         | Get details of Units owned or managed by the user's account in SMP                                      | Must have a valid authentication Token | Select Unit                                                         |
| <b>Read Service Catalog</b>         | Sync         | Get details of Services available in SMP                                                                | Must have a valid authentication Token | Select Service Catalog                                              |
| <b>Manage Asset Testing Service</b> | Sync & Async | Create new Asset Testing Service(s) in SMP                                                              | Must have a valid authentication Token | Create Asset Testing Service<br>Notification<br>GetTransactionState |
| <b>Update Inventory</b>             | Sync & Async | Update Unit and Unit Service details, Asset Alignments, Asset Details and Asset Testing Service Details | Must have a valid authentication Token | Update Inventory<br>Notification<br>GetTransactionState             |

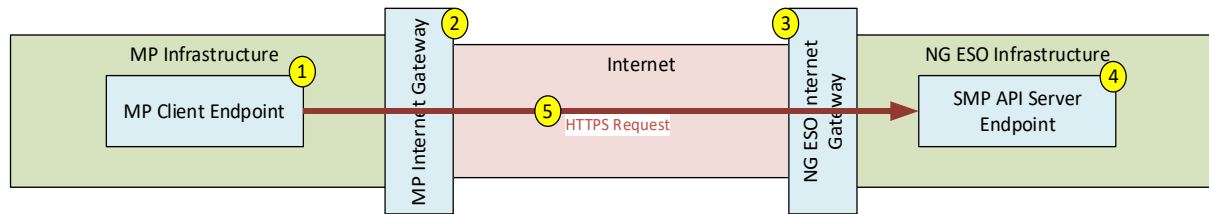
## Available SMP API Calls

| API Name                            | Initiated by       | Purpose                                                                 | Pre-requisites                         | Request                                                      | Response                           |
|-------------------------------------|--------------------|-------------------------------------------------------------------------|----------------------------------------|--------------------------------------------------------------|------------------------------------|
| <b>Authenticate</b>                 | Market Participant | Request an Authentication Token for use in other API Calls              | None                                   | Authentication Credentials                                   | JWT token                          |
| <b>Create Asset</b>                 | Market Participant | Start a transaction to create new Asset(s) in SMP                       | Must have a valid authentication Token | Asset JSON (max 1000 Assets)                                 | Transaction ID or Asset Error JSON |
| <b>Create Unit</b>                  | Market Participant | Start a transaction to create a new Unit in SMP                         | Must have a valid authentication Token | Unit JSON (max 1 unit)                                       | Transaction ID or Unit Error JSON  |
| <b>Update Unit</b>                  | Market Participant | Start a transaction to update a Unit in Draft or Accepted Status in SMP | Must have a valid authentication Token | Unit JSON (max 1 unit)                                       | Transaction ID or Unit Error JSON  |
| <b>Create Asset Testing Service</b> | Market Participant | Start a transaction to create a new Asset Testing Service in SMP        | Must have a valid authentication Token | Asset Testing Service JSON (max 3000 Asset Testing Services) | Transaction ID or Unit Error JSON  |

|                               |                    |                                                                             |                                                                                                             |                         |                                               |
|-------------------------------|--------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------|
| <b>Select Asset</b>           | Market Participant | Get information about Assets linked to the user's account in SMP            | Must have a valid authentication Token                                                                      |                         | Asset JSON                                    |
| <b>Select Unit</b>            | Market Participant | Get information about Units linked to the user's account in SMP             | Must have a valid authentication Token                                                                      |                         | Unit JSON                                     |
| <b>Get Transaction Status</b> | Market Participant | Get the status of a submitted transaction                                   | Must have a valid authentication Token                                                                      | Transaction ID          | Incomplete Transaction: Transaction Status    |
|                               |                    |                                                                             | Must have a valid Transaction ID                                                                            |                         | Complete Transaction: Asset JSON or Unit JSON |
| <b>Notify</b>                 | SMP API            | Notify the Market Participant of the results of an asynchronous transaction | SMP API must have been provided with URL, Username and Password in the API Call initiating the transaction. | Asset JSON or Unit JSON | -                                             |

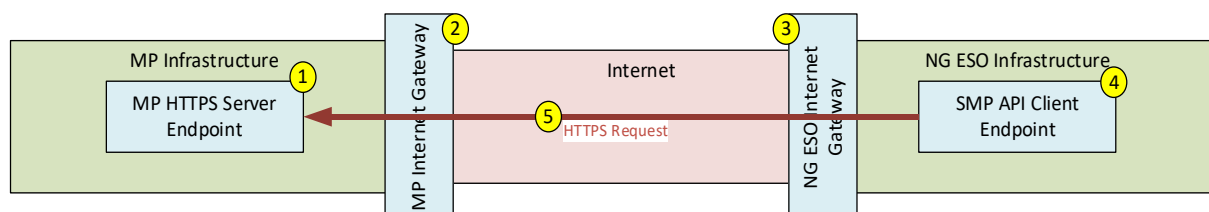
# Market Participant Infrastructure Requirements

## Market Participant Initiated Calls



| # | Item                    | Type      | Description                                                                                                                                                                                                |
|---|-------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | MP Client Endpoint      | Component | This is the Client Endpoint that will initiate a connection to the SMP API.                                                                                                                                |
| 2 | MP Internet Gateway     | Component | This is the Internet Gateway that provides connectivity between the Market Participant's Client Endpoint and the internet. It should implement appropriate security measures.                              |
| 3 | NESO Internet Gateway   | Component | This is the Internet Gateway that provides connectivity between the SMP API and the Internet. It implements security points and checks, including validating incoming flows are coming from known sources. |
| 4 | SMP API Server Endpoint | Component | This is the HTTPS endpoint that the Market Participant will connect to when initiating a call to the SMP API. It will enforce that the client is using TLS1.2 or later.                                    |
| 5 | HTTPS API Request       | Flow      | This is an instance of a connection from Market Participant to SMP API, for example to perform an authentication request or submit a transaction.                                                          |

## SMP API Initiated Calls



| # | Item | Type | Description |
|---|------|------|-------------|
|---|------|------|-------------|

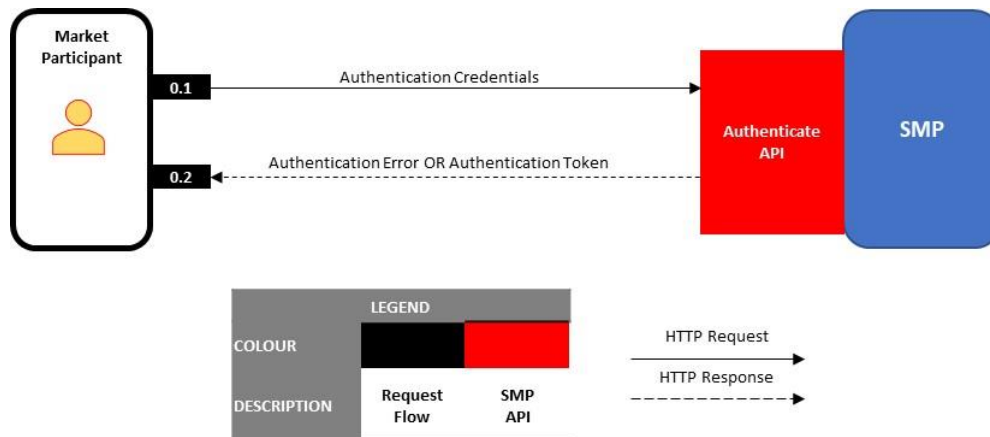
|   |                                |           |                                                                                                                                                                                                                                                                                           |
|---|--------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | MP HTTPS<br>Server<br>Endpoint | Component | This is the server endpoint that the SMP API will connect to when it wants to send data to the Market Participant, e.g. the results of an Asynchronous Transaction. This must implement at least TLS1.2 (ideally 1.3+) and Basic Authentication.                                          |
| 2 | MP Internet<br>Gateway         | Component | This is the Internet Gateway that provides connectivity between the Market Participant's HTTPS Server Endpoint and the internet. It should implement appropriate security measures to ensure the integrity of the connections.                                                            |
| 3 | NESO Internet<br>Gateway       | Component | This is the Internet Gateway that provides connectivity between the SMP API and the Internet. It implements security best practices.                                                                                                                                                      |
| 4 | SMP API<br>Client<br>Endpoint  | Component | This is the Endpoint that will initiate a connection to the Market Participant. It will enforce that the Market Provider's HTTPS Endpoint is using TLS1.2 or later and provide the Username/Password for authorisation prior to presenting the outgoing message to the MP HTTPS Endpoint. |
| 5 | HTTPS<br>Request               | Flow      | This is an instance of a connection from SMP API to Market Participant, for example to carry the results of an asynchronous transaction. Upon receipt of the data from SMP API, the Market Participant's HTTPS Server Endpoint should issue an HTTPS 200 OK message.                      |

It should be noted that, to receive the results of an asynchronous transaction, the URL of the MP HTTPS Server Endpoint, and the username and password to be used for Basic Authentication will need to be submitted as part of the call initiating the asynchronous transaction. Providing this dynamically as part of the initiating call means the Market Participant can rotate the username/password in use and switch to alternative sites without manual intervention.

## API: Authenticate

### Overview

Market Participant to make a call to Authenticate API to get JWT Token which can then be provided to authorise access to other SMP APIs (e.g., Create Asset, Get Transaction Status etc).



| #   | Dataflow                   | Transfer Type | Payload                                                                                                       |
|-----|----------------------------|---------------|---------------------------------------------------------------------------------------------------------------|
| 0.1 | Request Transaction Status | Request       | Authentication Credentials                                                                                    |
| 0.2 | Receive Transaction status | Response      | One of: <ul style="list-style-type: none"><li>• Authentication Error</li><li>• Authentication Token</li></ul> |

## Specification

### Submission

The submission to the Authenticate API is a POST request made up of the following parameters:

| PARAMETER | DESCRIPTION |
|-----------|-------------|
|-----------|-------------|



|                      |                                                                                 |
|----------------------|---------------------------------------------------------------------------------|
| <b>client_id</b>     | Client ID for the SMP API; provided by NESO for access during registration      |
| <b>client_secret</b> | Client Secret for the SMP API; provided by NESO as part of registration         |
| <b>grant_type</b>    | Grant being requested – always “password”                                       |
| <b>username</b>      | Market Participant’s SMP API Username; provided by NESO as part of registration |
| <b>password</b>      | Market Participant’s SMP API Password; provided by NESO as part of registration |
| <b>Scope</b>         | Scope for the SMP API; provided by NESO as part of registration                 |

## Response

The Authentication API will response with a JSON Payload of the following format:

| Key               | Value                                                                         |
|-------------------|-------------------------------------------------------------------------------|
| {                 |                                                                               |
| "token_type":     | Always “Bearer”                                                               |
| "scope":          | Will match the Scope provided                                                 |
| "expires_in":     | Time to expiry of token                                                       |
| "ext_expires_in": | Time to expiry of token                                                       |
| "access_token":   | The access token that can be used to authorise access to other SMP API calls. |
| }                 |                                                                               |

## Payload Examples

### Submission Example

Rather than post a sample URL, we have included a sample CURL Request as that shows the required information clearly:

```
curl --location --request POST 'https://login.microsoftonline.com/f98a6a53-25f3-4212-901c-c7787fcd3495/oauth2/v2.0/token' \
--header 'Content-Type: application/x-www-form-urlencoded' \
--header 'Cookie: fpc=AsOugKFV9eNChNiNJ4sd8jj2f-MfAQAAAOC919oOAAAA; stsservicecookie=estsfd; x-ms-gateway-slice=estsfd' \
--data-urlencode 'client_id=my_client_id' \
--data-urlencode 'client_secret=my_client_secret' \
--data-urlencode 'grant_type=password' \
--data-urlencode 'username=my_username' \
--data-urlencode 'password=my_password' \
--data-urlencode 'scope=api://57070d1e-35df5-4e11-9d04-47033e3048be/SMP_API'
```

### Response Example

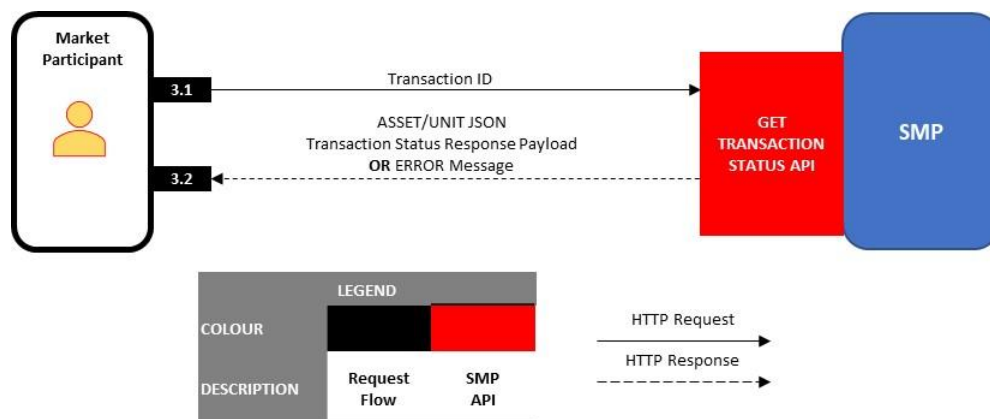
```
{
  "token_type": "Bearer",
  "scope": "api://57070d1e-35df5-4e11-9d04-47033e3048be/SMP_API",
  "expires_in": 4918,
  "ext_expires_in": 4918,
  "access_token": "eyJhbGciOiJIUzI1NiJ9.eyJ1bm1xdWVfbmFtZSI6I1NNUFVzZXJhbm1haWwEb21haW4u"
}
```

```
Q29tIiwiYXBwaWRhY3IiOiIxIiwic2NvcGUiOiJhcGk6Ly81NzA3MGQxZS0zNWRmNS00ZTEuLTlkMDQtNDcwMzNlMzA
00GjLl1NNUF9BUeKiLCJncmFudF9UeXB1IjoIUGFzc3dvcmQiLCJhcHBpZCI6IjY3MD11YjEyLTM1OTUtNjd1Mi05ZD
A0LTc2ZjIzZWJjMDFiZSIsImIzcyI6IkVTTyIsImNsaWVudF9zZWNyZXQiOiJNeVNlY3JldCI6ImV4cCI6IjIwMjItM
TEtMTdUMTA6Mjk6NDguNjI4WiIsImIhdCI6IjIwMjItMTEtMTdUMTA6Mjk6NDguNjI4WiIsImNsaWVudF9pZCI6Ik15
Q2xpZW50SUQifQ.PZgKpDsrPS9mDMz8uIL6nMChn5QHs2lhGhqTLNz6VGk"
}
```

## API: Get Transaction Status

### Overview

Once an Asynchronous Transaction has been submitted and accepted, the resulting Transaction ID can be used to query the status of the transaction. If the transaction has completed, this call will return the payload that would have been sent via the resulting Notify Call.



| #   | Dataflow                   | Transfer Type | Payload                                                                                                                                                    |
|-----|----------------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.1 | Request Transaction Status | Request       | Get Transaction Status Request                                                                                                                             |
| 3.2 | Receive Transaction status | Response      | One of: <ul style="list-style-type: none"><li>Transaction ID Error</li><li>Transaction Status</li><li>Transaction Asset</li><li>Transaction Unit</li></ul> |

### Specification

#### Prerequisites

The Market Participant must

- have a valid JWT token issued by the Authenticate API
- have a valid TransactionID Issued by an initial asynchronous transaction call such as Create Asset or Create Unit.

## Request

The request is a GET call with the transaction ID suffixed to the GetTransactionStatusURL, i.e. <GetTransactionStatusURL>/<Transaction ID>, and the Authorisation JWT included in the headers,

## Response

### Invalid Transaction / Incomplete Transaction

If the transaction is unknown, then the API will return an Invalid Transaction response. If the transaction is incomplete, it will return the current status of the Transaction.

```
{
  <Transaction Block>      Information to notify of transaction information – see “Model –
                           Transaction” for key-value pairs contained in <Transaction Block>
}
```

### Complete Transaction – Create Unit

Please see Notify Response Payloads in Create Asset

### Complete Transaction – Create Asset

Please see Notify Response Payloads in Create Asset

## Payload Examples

### Response – Transaction Incomplete

```
{
  "Transaction ID": "CL-0000000143",
  "Transaction Status": "Load Completed",
  "Transaction Type": "Asset",
  "Action Type": "Create"
}
```

### Response – Invalid Transaction

```
{
  "Transaction ID": "CL-0000000143",
  "Error": "Unable to locate transaction"
}
```

## Response – Create Asset Complete

Please see Notify Sample Payloads in Create Asset

## Response – Create Unit Complete

Please see Notify Sample Payloads in Create Unit

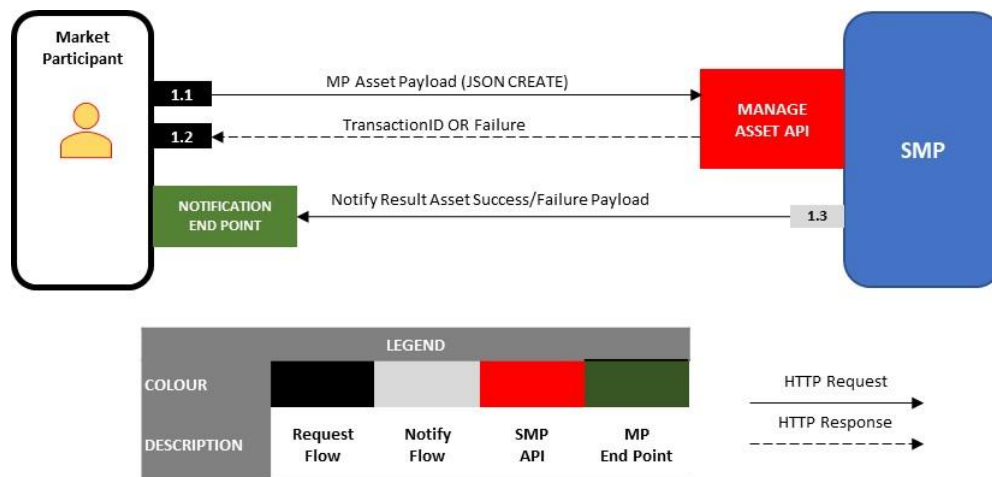
## Model – Transaction

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                | Data Type | Example           | Allowed Values                | Other Validation Rule                          |
|-----|--------------------|-----------|-------------------|-------------------------------|------------------------------------------------|
| O   | Transaction ID     | Text(10)  | 0000000418        |                               | Will be null if payload fails basic validation |
| M   | Transaction Status | Text(10)  | Process Completed | See Transaction State Diagram |                                                |
| M   | Transaction Type   | Text(10)  | Asset             | "Asset", "Unit"               |                                                |
| M   | Action Type        | Text(10)  | Create            | "Create, Update"              |                                                |

## API: Create Asset

### Overview



| #   | Dataflow                 | Transfer Type | Payload                                                                                                                                                              |
|-----|--------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.1 | Submit Asset Transaction | Request       | JSON Asset Payload                                                                                                                                                   |
| 1.2 | Transaction Response     | Response      | One of: <ul style="list-style-type: none"><li>Failed Data Validation</li><li>Transaction ID</li></ul>                                                                |
| 1.3 | Notification             | Request       | Asset Transaction JSON file providing: <ul style="list-style-type: none"><li>Successful records with SMP Asset ID</li><li>Unsuccessful records with errors</li></ul> |

### Specification

#### Request

The request is a simple JSON payload made up of 2 sections:

| Key                                                                                           | Value                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| {<br><Notify Block>,<br><br>"Assets":<br>[<br>{<Create Asset>},<br>{<Create Asset>}<br>]<br>} | Information required for SMP API to notify of transaction completion – see “Model – Notify” for key-value pairs contained in <Notify Block><br><br>Section containing information on the Assets to be loaded into SMP. It will consist of one or more instance of <Create Assetk>. See “Model – Create Asset” for key-value pairs. |

## Response

A successful response is a JSON payload made up of 2 sections

|                                                                                                  |                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| {<br><Transaction Block>,<br><br>"Assets":<br>[<br>{<Asset Block>},<br>{<Asset Block>}<br>]<br>} | Information to notify of transaction information – see “Model – Transaction” for key-value pairs contained in <Transaction Block><br><br>Optional Section containing information on the Assets to be loaded into SMP. It will consist of one or more instance of <Asset Block>. See “Model – Create Asset” for key-value pairs. |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Notify

After a Create Asset transaction has completed, the resulting notification will consist of a JSON payload

|                                    |                                                                                                                                   |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| {<br><Transaction Block>,<br><br>} | Information to notify of transaction information – see “Model – Transaction” for key-value pairs contained in <Transaction Block> |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|



## Payload Models

### Model – Notify

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                   | Data Type | Example                                                                       | Allowed Values / Pattern | Other Validation Rule |
|-----|-----------------------|-----------|-------------------------------------------------------------------------------|--------------------------|-----------------------|
| M   | Notification Address  | Text(255) | <a href="https://api.myco.com/SMPNotify/">https://api.myco.com/SMPNotify/</a> |                          |                       |
| O   | Notification Username | Text(255) | MyUsername                                                                    |                          |                       |
| O   | Notification Password | Text(255) | MyPassword                                                                    |                          |                       |

### Model – Create Asset

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                    | Data Type | Example     | Allowed Values / Pattern | Other Validation Rule                                                                                                                   |
|-----|------------------------|-----------|-------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| M   | Asset Name             | Text(80)  | MyAssetName |                          | Must be Unique                                                                                                                          |
| O   | Asset Owner Company ID | Text(30)  | 04031152    |                          | Companies House Number<br>Must have an Approved Related Entity agreement between User's Account and Account belonging to the Company ID |
| O   | Asset Agent Company ID | Text(30)  | 04031153    |                          | Companies House Number<br>Must be the Companies House Number of the user's Account                                                      |

Asset Owner Company  
ID must be populated in  
order for the user to  
populate this payload  
tag

|   |                             |                         |                    |                                                  |                                                                                                                       |
|---|-----------------------------|-------------------------|--------------------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| M | Asset Type                  | Picklist (Multi-Select) | Generation Unit    | <b>See Appendix Picklist – Unit Types</b>        |                                                                                                                       |
| M | Applicable Market           | Picklist                | Balancing Services | <b>See Appendix Picklist – Asset Markets</b>     |                                                                                                                       |
| M | Effective From Date         | Date                    | 2022-11-11         | YYYY-MM-DD                                       | Must be today or later                                                                                                |
| M | Fuel Type                   | Picklist                | Batteries          | <b>See Appendix Picklist – Fuel Types</b>        |                                                                                                                       |
| O | Other Fuel Type             | Text(255)               | My Fuel Type       |                                                  | Mandatory if “Fuel Type” = “Other”                                                                                    |
| O | Generation Capacity         | Number(15,3)            | 50                 | XXXXXXXXXXXXXXXXX.XXX                            | Unit: MW<br>Mandatory if “Asset Type” = “Generation Unit”                                                             |
| O | Demand Capacity             | Number(15,3)            | 50                 | XXXXXXXXXXXXXXXXX.XXX                            | Unit: MW<br>Mandatory if “Asset Type” = “Demand Unit”                                                                 |
| M | Connection Type             | Picklist                | Firm               | <b>See Appendix Picklist – Connection Type</b>   |                                                                                                                       |
| O | Connection Method           | Picklist                | Firm               | <b>See Appendix Picklist – Connection Method</b> |                                                                                                                       |
| M | Connected to DNO            | Picklist                | True               | <b>See Appendix Picklist – Boolean</b>           |                                                                                                                       |
|   |                             |                         |                    |                                                  | Mandatory if “Connected to DNO” = True                                                                                |
| O | DNO                         | Picklist                | SP Energy Networks | <b>See Appendix Picklist - DNO</b>               | Must be one of ‘National Grid Electricity Distribution’ or ‘UK Power Networks’ if Applicable Market = RDP MW Dispatch |
| O | DNO Unique Reference Number | Text(10)                | 93265829452        |                                                  | Only required if “Connected to DNO” =                                                                                 |

|   |                                   |                         |           |                                                  |                                                                                                                                                                                 |
|---|-----------------------------------|-------------------------|-----------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                   |                         |           |                                                  | True AND “Applicable Market” = “RDP MW Dispatch”                                                                                                                                |
| M | Connection Point Voltage          | Picklist                | 400       | See Appendix Picklist – Connection Point Voltage | Unit: KV                                                                                                                                                                        |
| O | Other Connection Point Voltage kV | Number(16,2)            | 1100.00   | XXXXXXXXXXXXXXXXXX.YY                            | Unit: KV<br>Mandatory if “Connection Point Voltage” = “Other”                                                                                                                   |
| M | Postcode                          | Text(8)                 | AB6 7GH   |                                                  |                                                                                                                                                                                 |
| M | Longitude                         | Number(3,15)            | 51.707079 | +/- XXX.YYYYYYYYYYYYYYY                          | Accepts -180 to +180                                                                                                                                                            |
| M | Latitude                          | Number(2,15)            | -3.584902 | +/- XX.YYYYYYYYYYYYYYY                           | Accepts -90 to +90                                                                                                                                                              |
| O | Nearest Node                      | Text(6)                 | EFG       |                                                  | Mandatory if “Applicable Markets = Balancing Services”                                                                                                                          |
| M | GSP                               | Picklist (Multi-Select) | ABHA_1    | See Appendix Picklist - GSP                      | Must be one of ABHA_1, ALVE_1, AXMI_1, BRWA_1, EXET_1, INDQ_1, LAND_1 or TAUN_1 if the DNO = National Grid Electricity Distribution and the Applicable Market = RDP MW Dispatch |
|   |                                   |                         |           |                                                  | Must be one of BOLN_1, NINF_1, SELL_1, CANT_1, RICH_1 if the DNO = UK Power Networks and the Applicable Market = RDP MW Dispatch                                                |
| O | Other GSP                         | Text(10)                | My GSP    |                                                  | Mandatory if “GSP” = “Others”                                                                                                                                                   |

|   |                                   |              |                   |                                                           |                                                                                                                               |
|---|-----------------------------------|--------------|-------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| M | GSP Group ID                      | Picklist     | Eastern England   | See Appendix Picklist – GSP Group                         | Must be South Western England if the DNO = National Grid Electricity Distribution and the Applicable Market = RDP MW Dispatch |
|   |                                   |              |                   |                                                           | Must be South Eastern England if the DNO = UK Power Networks and the Applicable Market = RDP MW Dispatch                      |
| M | Primary Despatch Phone Number     | Text(10)     | 7554456564        |                                                           |                                                                                                                               |
| M | Primary Despatch Phone Country    | Picklist     | United Kingdom    | See Appendix - Picklist Country (Telephone)               |                                                                                                                               |
| M | Secondary Despatch Phone Number   | Number(10)   | 7676567657        |                                                           |                                                                                                                               |
| M | Secondary Despatch Phone Country  | Picklist     | United Kingdom    | See Appendix - Picklist Country (Telephone)               |                                                                                                                               |
| O | Fax Despatch Phone Number         | Text(10)     | 4645654643        |                                                           |                                                                                                                               |
| O | Fax Despatch Phone Country        | Picklist     | United Kingdom    | See Appendix - Picklist Country (Telephone)               |                                                                                                                               |
| M | Operational Metering Availability | Picklist     | Yes               | See Appendix Picklist – Operational Metering Availability |                                                                                                                               |
| O | Asset Size                        | Number(3,13) | 50                | XXX                                                       | Unit: MW                                                                                                                      |
| O | Site Contact Name                 | Text(255)    | SMP User          |                                                           |                                                                                                                               |
| O | Site Contact Number               | Number(10)   | 65767687688       |                                                           |                                                                                                                               |
| M | Site Street Address               | Text(255)    | Coronation Street |                                                           |                                                                                                                               |

|   |                                      |            |                                                        |
|---|--------------------------------------|------------|--------------------------------------------------------|
| M | Site City                            | Text(255)  | Reading                                                |
| M | Site State or County                 | Text(255)  | Berkshire                                              |
| M | Site Country                         | Text(255)  | United Kingdom                                         |
| O | Agent or Applicant Operational Email | Email      | <a href="mailto:smpuser@test.com">smpuser@test.com</a> |
| O | Agent or Applicant Operational Phone | Number(10) | 65767687688                                            |

### Model – Asset

This Model includes all fields in Model – Create Asset plus the following:

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload.

| M/O | Tag           | Data Type  | Example    | Allowed Values / Pattern | Other Validation Rule                           |
|-----|---------------|------------|------------|--------------------------|-------------------------------------------------|
| O   | Asset ID      | Number(10) | 0000000636 | XXXXXXXXXX               | Will be returned if Assets Created successfully |
| O   | Error Message | Long Text  |            | O                        | Error Message                                   |

### Model – Transaction

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                | Data Type | Example           | Allowed Values                | Other Validation Rule                          |
|-----|--------------------|-----------|-------------------|-------------------------------|------------------------------------------------|
| O   | Transaction ID     | Text(10)  | CL-0000000143     |                               | Will be null if payload fails basic validation |
| M   | Transaction Status | Text(10)  | Process Completed | See Transaction State Diagram |                                                |
| M   | Transaction Type   | Text(10)  | Asset             | “Asset”, “Unit”               |                                                |
| M   | Action Type        | Text(10)  | Create            | “Create”                      |                                                |



## Payload Samples

### Request

```
{
  "Notification Address": "HTTPS://www.callback.xyztestenergy.co.uk",
  "Notification Username": "XYZ Test Energy",
  "Notification Password": "*****",
  "Action Type": "Create",
  "Assets": [{
    "Asset Name": "Asfordby",
    "Asset Owner Company ID": "2796628",
    "Asset Agent Company ID": "801002",
    "Asset Type": "Generation Unit",
    "Applicable Market": "RDP MW Dispatch",
    "Effective From Date": "2022-06-19",
    "Fuel Type": "Other",
    "Other Fuel Type": "Wind",
    "Generation Capacity MW": 50,
    "Connection Type": "Firm",
    "Connected to DNO": true,
    "DNO": "South Western England",
    "DNO Unique Reference Number": "DNO1234567",
    "Connection Point Voltage": "Other",
    "Other Connection Point Voltage kV": 1100.00,
    "Connection Method": "Distribution;Private Lines",
    "Postcode": "RG1 7QE",
    "Longitude": "51.707079",
    "Latitude": "-3.584902",
    "Nearest Node": "EFG123",
    "GSP": "ABHA_1",
    "Other GSP": ""
    "GSP Group ID": "Eastern England",
    "Primary Despatch Phone Country": "United Kingdom",
    "Primary Despatch Phone Number": "7554456564",
    "Secondary Despatch Phone Country": "United Kingdom",
    "Secondary Despatch Phone Number": "7676567657",
    "Fax Despatch Phone Country": "United Kingdom",
    "Fax Despatch Phone Number": "4645654643",
    "Operational Metering Availability": "Yes",
    "Asset Size MW": 50,
    "Site Contact Name": "SMP User1",
    "Site Contact Number": "5767687688",
    "Site Street Address": "Street1",
    "Site City": "Reading",
    "Site State or County": "Berkshire",
    "Site Country": "United Kingdom",
    "Agent or Applicant Operational Email": "user1@nationalgrid.com",
    "Agent or Applicant Operational Phone": "65767687688"
  }, {
    "Asset Name": "Lockleaze",
    "Asset Owner Company ID": "",
    "Asset Type": "Generation Unit;Demand Unit",
    "Applicable Market": "Balancing Services",
    "Effective From Date": "2022-11-30",
    "Fuel Type": "Batteries",
    "Other Fuel Type": "",
    "Generation Capacity MW": 50,
    "Demand Capacity MW": 50,
    "Connection Type": "Flexible",
    "Connected to DNO": false,
    "DNO": "",
    "DNO Unique Reference Number": "",
    "Connection Point Voltage": "400",
    "Connection Method": "Distribution",
  }
}
```

```

        "Postcode": "RG30 2HT",
        "Longitude": "41.707079",
        "Latitude": "-10.584902",
        "Nearest Node": "EFGABC",
        "GSP": "ABHA_1;Others",
        "Other GSP": "Other GSP",
        "GSP Group ID": "Eastern England",
        "Primary Despatch Phone Country": "United Kingdom",
        "Primary Despatch Phone Number": "7554456564",
        "Secondary Despatch Phone Country": "United Kingdom",
        "Secondary Despatch Phone Number": "7676567657",
        "Fax Despatch Phone Country": "United Kingdom",
        "Fax Despatch Phone Number": "4645654643",
        "Operational Metering Availability": "Yes",
        "Asset Size MW":50,
        "Site Contact Name": "SMP User2",
        "Site Contact Number": "5767687689",
        "Site Street Address": "Street2",
        "Site City": "Reading",
        "Site State or County": "Berkshire",
        "Site Country": "United Kingdom",
        "Agent or Applicant Operational Email": "user2@nationalgrid.com",
        "Agent or Applicant Operational Phone": "65767687689"
    }
}

```

## Response - Success

```

{
  "Transaction ID":" CL-0000000143",
  "Transaction Status":"Load Completed",
  "Transaction Type":"Asset",
  "Action Type":"Create"
}

```

## Response - Failure

```

{
  "Transaction ID":" CL-0000000143",
  "Transaction Status":"Load Failed",
  "Transaction Type":"Asset",
  "Action Type":"Create",
  "Assets":[
    {
      "Asset Name":"MyAsset01",
      "Error Message":" Operational Metering Availability: Missing Mandatory
Field"
    },
    {
      "Asset Name":"MyAsset02"
      "Error Message":"Fax Despatch Phone Number: Invalid Format"
    }
  ]
}

```

## Notification - Failure

```

{
  "Transaction ID":" CL-0000000143",
  "Transaction Status":"Process Error",
  "Transaction Type":"Asset",
  "Action Type":"Create",

```



```

    "Assets": [
      {
        "Asset Name": "MyAsset01",
        "Error Message": "Asset with the same name already exists for this
company"
      },
      ...
    ],
    {
      "Asset Name": "MyAsset02",
      "Error Message": "Asset with the same name already exists for this
company"
    },
    ...
  ]
}

```

## Notification - Success

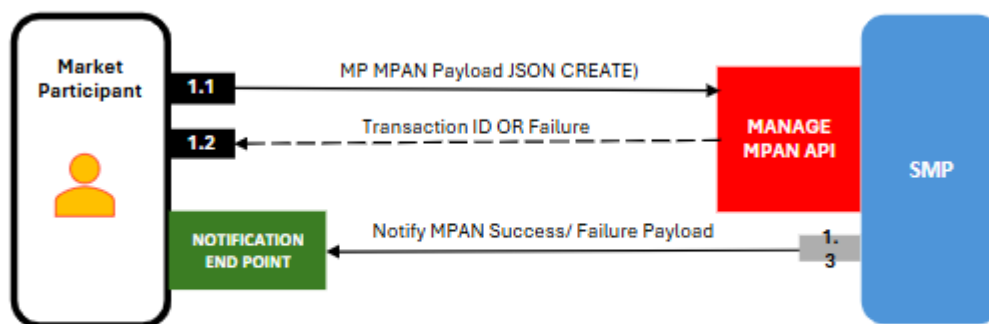
```

{
  "Transaction ID": "CL-0000001135",
  "Transaction Status": "Process Completed",
  "Transaction Type": "Asset",
  "Action Type": "Create"
}

```

## API: Create MPAN Pairs

### Overview



| #   | Dataflow                 | Transfer Type | Payload           |
|-----|--------------------------|---------------|-------------------|
| 1.1 | Submit Asset Transaction | Request       | JSON MPAN Payload |

|     |                      |          |                                                                                                                                                                         |
|-----|----------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.2 | Transaction Response | Response | One of: <ul style="list-style-type: none"> <li>Failed Data Validation</li> <li>Transaction ID</li> </ul>                                                                |
| 1.3 | Notification         | Request  | Asset Transaction JSON file providing: <ul style="list-style-type: none"> <li>Successful records with SMP Asset ID</li> <li>Unsuccessful records with errors</li> </ul> |

## Specification

### Request

The request is a simple JSON payload made up of 2 sections:

| Key                                                                                                                                | Value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| {<br><Notify Block>,<br><br>"MPAN Pairs":<br>[<br>{<Create MPAN Pair>},<br>"MPAN Consent"<br>{<Create MPAN Consent>}<br>]<br><br>} | Information required for SMP API to notify of transaction completion – see “Model – Notify” for key-value pairs contained in <Notify Block><br><br>Section containing information on the MPAN Pairs & Consent to be loaded into SMP .It will consist of one or more instance of <Create MPAN Pairs>. See “Model – Create MPAN Pairs” for key-value pairs. It is now mandatory to create MPAN Pair and Consent records for every Asset prior to aligning an asset to a Unit. The payload tags for MPAN Import/Export and Additional MPAN Import/Export have been removed from the Create Asset API as this API now supersedes the need for them to be included. |

### Response

A successful response is a JSON payload made up of 2 sections

|                           |                                                                                                                                   |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| {<br><Transaction Block>, | Information to notify of transaction information – see “Model – Transaction” for key-value pairs contained in <Transaction Block> |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------|

"MPAN Pairs":

```
[  
  {<Create MPAN Pair>},  
  "MPAN Consent"  
  {<Create MPAN  
Consent>}  
]  
}
```

Optional Section containing information on the MPAN Pairs and Consents to be loaded into SMP. It will consist of one or more instance of <MPAN Pair Block>. See "Model – Create MPAN Pair" for key-value pairs.

## Notify

After a Create MPAN Pair transaction has completed, the resulting notification will consist of a JSON payload

```
{  
  <Transaction Block>,  
  
}
```

Information to notify of transaction information – see "Model – Transaction" for key-value pairs contained in <Transaction Block>

## Payload Models

### Model – Notify

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                   | Data Type | Example                         | Allowed Values / Pattern | Other Validation Rule |
|-----|-----------------------|-----------|---------------------------------|--------------------------|-----------------------|
| M   | Notification Address  | Text(255) | https://api.myco.com/SMPNotify/ |                          |                       |
| O   | Notification Username | Text(255) | MyUsername                      |                          |                       |
| O   | Notification Password | Text(255) | MyPassword                      |                          |                       |

### Model – Create MPAN Pair

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag         | Data Type | Example       | Allowed Values / Pattern | Other Validation Rule                                                                                                     |
|-----|-------------|-----------|---------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------|
| M   | Asset ID    | Text(15)  | 0000199306    |                          | Must be the Asset ID of an Asset owned or managed by the user's account. This is obtainable through the Select Asset API. |
| O   | MPAN Import | Text(13)  | 1127146756189 |                          | Must be 13 digits long (MPANs) or 4 digits long (MSIDs). At least one of MPAN Import or MPAN Export values must be given. |

|   |                         |                   |               |             |                                                                                                                                                                         |
|---|-------------------------|-------------------|---------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| O | MPAN Export             | Text(13)          | 1123614756880 |             | Must be 13 digits long (MPANs) or 4 digits long (MSIDs). At least one of MPAN Import or MPAN Export values must be given.                                               |
| M | MPAN Start Date         | Date (YYYY-MM-DD) | 2025-10-20    |             | Must be today or later                                                                                                                                                  |
| M | MPAN End Date           | Date (YYYY-MM-DD) | 2025-10-20    |             | Must be today or later                                                                                                                                                  |
| O | MPAN Import Consent     | Text (5)          | True          | True, False | Mandatory if value for 'MPAN Import' is present. Indicates consent to SVAA sharing the metered data applicable to this asset with the Supplier, as detailed by the BSC. |
| O | MPAN Export Consent     | Text (5)          | True          | True, False | Mandatory if value for 'MPAN Export' is present. Indicates consent to SVAA sharing the metered data applicable to this asset with the Supplier, as detailed by the BSC. |
| M | MPAN Consent Start Date | Date (YYYY-MM-DD) | 2025-10-20    |             | Must be today or later                                                                                                                                                  |
| M | MPAN Consent End Date   | Date (YYYY-MM-DD) | 2025-10-20    |             | Must be today or later                                                                                                                                                  |

## Model – Transaction

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                | Data Type | Example           | Allowed Values                | Other Validation Rule                          |
|-----|--------------------|-----------|-------------------|-------------------------------|------------------------------------------------|
| O   | Transaction ID     | Text(10)  | CL-0000000143     |                               | Will be null if payload fails basic validation |
| M   | Transaction Status | Text(10)  | Load Completed    | See Transaction State Diagram |                                                |
| M   | Transaction Type   | Text(10)  | MPAN Pair Consent | “MPAN Pair Consent”           |                                                |
| M   | Action Type        | Text(10)  | Create            | “Create”                      |                                                |

## Payload Samples

### Request

Up to 3 MPAN Pairs can be specified per Asset. Every MPAN Pair must have a corresponding MPAN Consent record.

```
{
  {
    "Notification Address": "HTTPS://www.callback.xyztestenergy.co.uk",
    "Notification Username": "XYZ Test Energy",
    "Notification Password": "dgfdsfgksh",
    "Action Type": "Create",
    "MPAN Pairs": [{
      "Asset ID": "0000101600",
      "MPAN Import": "1123456756700",
      "MPAN Export": "1123456756701",
      "MPAN Start Date": "2025-06-25",
      "MPAN End Date": "2025-06-26",
      "MPAN Consent": {
        "MPAN Import Consent": "True",
        "MPAN Export Consent": "True",
        "MPAN Consent Start Date": "2025-06-25",
        "MPAN Consent End Date": "2025-06-26"
      }
    }, {
      "Asset ID": "0000101655",
      "MPAN Export": "1123456756770",
      "MPAN Start Date": "2025-06-25",
      "MPAN End Date": "2049-06-26",
      "MPAN Consent": {
        "MPAN Import Consent": "True",
        "MPAN Export Consent": "False",
        "MPAN Consent Start Date": "2025-06-25",
        "MPAN Consent End Date": "2049-06-26"
      }
    }
  ]
}
```

### Response - Success

```
{
  "Transaction ID": "CL-0000000300",
  "Transaction Status": "Load Completed",
  "Transaction Type": "MPAN Pair Consent",
  "Action Type": "Create"
}
```

### Response - Failure

```
{
  "Transaction ID": "CL-0000000300",
  "Transaction Status": "Load Failed",
  "Transaction Type": "MPAN Pair Consent",
  "Action Type": "Create",
  "MPAN Pairs": [
    {
      "Asset ID": "0000101618",
      "MPAN Import": "1123456756789",
      "MPAN Export": "1123456756790",
      "Error Message": "MPAN End Date is Missing",
    }
  ]
}
```

```

    "MPAN Consent": {
      "Asset ID": "0000101618",
      "MPAN Import Consent": "True",
      "MPAN Export Consent": "True",
      "Error Message": "MPAN Consent End Date is Missing"
    }
  ]
}

```

## Notification - Failure

```

{
  "Transaction ID": "CL-0000000798",
  "Transaction Status": "Process Error",
  "Transaction Type": "MPAN Pair Consent",
  "Action Type": "Create",
  "MPAN Pairs": [
    {
      "Asset ID": "0000101618",
      "MPAN Import": "1123456756789",
      "MPAN Export": "1123456756790",
      "Error Message": "MPAN Pair: Missing Mandatory Field",
      "MPAN Consent": {
        "Asset ID": "0000101618",
        "MPAN Import Consent": "True",
        "MPAN Export Consent": "False",
        "Error Message": "MPAN Consent End Date is Missing"
      }
    },
    {
      "Asset ID": "0000101618",
      "MPAN Import": "1123456756789",
      "MPAN Export": "1123456756790",
      "Error Message": "null",
      "MPAN Consent": {
        "Asset ID": "0000101618",
        "MPAN Import Consent": "True",
        "MPAN Export Consent": "False",
        "Error Message": "null"
      }
    }
  ]
}

```

## Notification - Success

```

{
  "Transaction ID": "CL-0000000291",
  "Transaction Status": "Process Completed",
  "Transaction Type": "MPAN Pair Consent",
  "Action Type": "Create"
}

```

## API: Select Asset

### Overview



| #   | Dataflow             | Transfer Type | Payload                                                                                                               |
|-----|----------------------|---------------|-----------------------------------------------------------------------------------------------------------------------|
| 3.1 | Submit Asset Request | Request       |                                                                                                                       |
| 3.2 | Transaction Response | Response      | <ul style="list-style-type: none"> <li>Transaction ID</li> </ul>                                                      |
| 3.3 | Notification         | Request       | Asset Transaction JSON file providing: <ul style="list-style-type: none"> <li>JSON file with Asset details</li> </ul> |

## Payload Samples

### Notification – Success

```
{
  "Transaction Type": "Asset"
  "Transaction Status": "Success"
  "Action Type": "Select",
  "Assets":
[
  {
    "Asset Id": "0000106721",
    "Asset Name": "BS Test Asset 3",
    "Asset Owner Name": "JAQUARD LTD",
    "Asset Owner Account Unique Identifier": 10007725,
    "Asset Owner Company ID": "11012159",
    "Asset Agent Name": null,
    "Asset Agent Company ID": null,
    "Asset Agent Account Unique Identifier ": 10048332,
    "Type": "Generation Unit",
    "Asset Status": "Versioned",
    "Applicable Market": "Balancing Services",
    "Effective From Date": 2024-03-05, - Date (U)
    "Effective To Date": 2024-04-03, - Date(U)
    "Fuel Type": "Biomass",
    "Other Fuel Type": null,
    "Generation Capacity": 60, - Number(C)
    "Demand Capacity": null, - Number(C)
    "Connection Type": "Firm",
    "Connected to DNO": false, - Boolean(C)
    "DNO": null,
    "DNO Unique Reference Number": null,
    "Connection Point Voltage": null,
    "Other Connection Point Voltage kV": null, - Number (C)
    "Connection Method": null,
    "Postcode": "12345",
    "Longitude": 73.01,
    "Latitude": 72.01,
    "Nearest Node": "sdf",
    "GSP": "ABHA_1",
    "Other GSP": null,
    "GSP Group ID": "East Midlands",
    "Primary Despatch Phone Country": "United Kingdom",
    "Primary Despatch Phone Number": "3333333333",
    "Secondary Despatch Phone Country": "United Kingdom",
```

```

    "Secondary Despatch Phone Number": "4444444444",
    "Fax Despatch Phone Country": null,
    "Fax Despatch Phone Number": null,
    "Operational Metering Availability": "Yes",
    "Asset Size": null, - Number (C)
    "Site Contact Name": null,
    "Site Contact Number": null,
    "Site Street Address": "St",
    "Site City": "qw",
    "Site State or County": "qwe",
    "Country": "qw",
    "Agent or Applicant Operational Email": null,
    "Agent or Applicant Operational Phone": null,
    "Asset Testing Service":[
        {
            "Date Approved by ITE": "2024-03-19",
            "Service Name": "Dynamic Regulation LF",
            "Service Code": "DRL",
            "Tested Capacity": 60,
            "Unit of Measurement": "MW"
        }
    ],
    {
        "Asset Id": "0000106721",
        "Asset Name": "BS Test Asset 3",
        "Asset Owner Name": "JAQUARD LTD",
        "Asset Owner Account Unique Identifier": 10007725,
        "Asset Owner Company ID": "11012159",
        "Asset Agent Name": "OPEN LIMITED",
        "Asset Agent Company ID": "04037885",
        "Asset Agent Account Unique Identifier ": 10048311,
        "Type": "Generation Unit",
        "Asset Status": "Accepted",
        "Applicable Market": "Balancing Services",
        "Effective From Date": "2024-04-04",
        "Effective To Date": "2024-04-05",
        "Fuel Type": "Biomass",
        "Other Fuel Type": null,
        "Generation Capacity": 60,
        "Demand Capacity": null,
        "Connection Type": "Firm",
        "Connected to DNO": false,
        "DNO": null,
        "DNO Unique Reference Number": null,
        "Connection Point Voltage": null,
        "Other Connection Point Voltage kV": null,
        "Connection Method": null,
        "Postcode": "12345",
        "Longitude": 73.01,
        "Latitude": 72.01,
        "Nearest Node": "sdf",
        "GSP": "ABHA_1",
        "Other GSP": null,
        "GSP Group ID": "East Midlands",
        "Primary Despatch Phone Country": "United Kingdom",
        "Primary Despatch Phone Number": "3333333333",
        "Secondary Despatch Phone Country": "United Kingdom",
        "Secondary Despatch Phone Number": "4444444444",
        "Fax Despatch Phone Country": null,
        "Fax Despatch Phone Number": null,
        "Operational Metering Availability": "Yes",
        "Asset Size": null,
        "Site Contact Name": null,
        "Site Contact Number": null,
        "Site Street Address": "St",
        "Site City": "qw",
        "Site State or County": "qwe",
        "Site Country": "qw",

```

```

    "Agent or Applicant Operational Email": null,
    "Agent or Applicant Operational Phone": null,
    "Asset Testing Service": [
      {
        "Date Approved by ITE": "2024-03-08",
        "Service Name": "Dynamic Regulation LF",
        "Service Code": "DRL",
        "Tested Capacity": 50,
        "Unit of Measurement": "MW"
      }
    ]
  },
  {
    "Asset Id": "0000106759",
    "Asset Name": "Asset 2 29 Mar",
    "Asset Owner Name": "JAQUARD LTD",
    "Asset Owner Account Unique Identifier": 10007725,
    "Asset Owner Company ID": "11012159",
    "Asset Agent Name": null,
    "Asset Agent Company ID": null,
    "Asset Agent Account Unique Identifier ": 10048234,
    "Type": "Generation Unit;Demand Unit",
    "Asset Status": "Accepted",
    "Applicable Market": "Balancing Services",
    "Effective From Date": "2024-03-29",
    "Effective To Date": null,
    "Fuel Type": "CCGT",
    "Other Fuel Type": null,
    "Generation Capacity": 70,
    "Demand Capacity": 70,
    "Connection Type": "Firm",
    "Connected to DNO": false,
    "DNO": null,
    "DNO Unique Reference Number": null,
    "Connection Point Voltage": null,
    "Other Connection Point Voltage kV": null,
    "Connection Method": null,
    "Postcode": "70",
    "Longitude": 70,
    "Latitude": 70,
    "Nearest Node": "70",
    "GSP": "ABTH_1",
    "Other GSP": null,
    "GSP Group ID": "East Midlands",
    "Primary Despatch Phone Country": "United Kingdom",
    "Primary Despatch Phone Number": "9876543210",
    "Secondary Despatch Phone Country": "United Kingdom",
    "Secondary Despatch Phone Number": "9876543210",
    "Fax Despatch Phone Country": null,
    "Fax Despatch Phone Number": null,
    "Operational Metering Availability": "Yes",
    "Asset Size": null,
    "Site Contact Name": null,
    "Site Contact Number": null,
    "Site Street Address": "70",
    "Site City": "70",
    "Site State or County": "70",
    "Country": "70",
    "Agent or Applicant Operational Email": null,
    "Agent or Applicant Operational Phone": null,
    "Asset Testing Service": [
      {
        "Date Approved by ITE": "2024-03-30",
        "Service Name": "Dynamic Regulation HF",
        "Service Code": "DRH",
        "Tested Capacity": 90,
        "Unit of Measurement": "MW"
      }
    ]
  }

```

```
        "Date Approved by ITE": "2024-03-30",
        "Service Name": "Static FFR",
        "Service Code": "SFR",
        "Tested Capacity": 80,
        "Unit of Measurement": "MW"
      }
    ]
  }
}
```

## API: Select MPAN Pair

### Overview

This is an API for a user to read their MPAN & Consent Information. When calling the API, there are parameters that can be provided to filter the response and reduce the return payload:

- assetId - If provided, limits the MPANs to those that are associated with the Asset ID provided
  - mpanUuid - If provided, limits the MPAN Pairs to those that match the list of MPAN UUIDs provided
- Both are optional and both cannot be selected for the same transaction. They can be used as parameters as in the below example:

Params • Authorization • Headers (10) Body Pre-request Script Tests Settings

Query Params

| <input type="checkbox"/> Key                | Value           | Description |
|---------------------------------------------|-----------------|-------------|
| <input checked="" type="checkbox"/> assetId | 0000171573      |             |
| <input type="checkbox"/> mpanUuid           | 100000000010134 |             |
| <input type="checkbox"/> Key                | Value           | Description |

| #   | Dataflow                 | Transfer Type | Payload                                                                                                                                         |
|-----|--------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.1 | Submit MPAN Pair Request | Request       |                                                                                                                                                 |
| 3.2 | Transaction Response     | Response      | <ul style="list-style-type: none"><li>Transaction ID</li></ul>                                                                                  |
| 3.3 | Notification             | Request       | <div>MPAN Transaction JSON file providing:</div> <ul style="list-style-type: none"><li>JSON file with MPAN &amp; MPAN Consent details</li></ul> |

### Payload Samples

Notification – Success

```

{
  "Transaction Type": "MPAN Pair Consent",
  "Transaction Status": "Success",
  "Action Type": "Select",
  "MPAN Pairs": [
    {
      "Asset ID": "0000101600",
      "MPAN UUID": 1000000000000001,
      "MPAN Import": "1123456756700",
      "MPAN Export": "1123456756701",
      "MPAN Start Date": "2025-06-25",
      "MPAN End Date": "2025-06-30",
      "MPAN Consent": [
        {
          "MPAN Consent UUID": 1000000000000002,
          "MPAN Import Consent": "True",
          "MPAN Export Consent": "True",
          "MPAN Consent Start Date": "2025-06-25",
          "MPAN Consent End Date": "2025-06-26"
        }
      ]
    },
    {
      "Asset ID": "0000101655",
      "MPAN UUID": 1000000000000005,
      "MPAN Export": "1123456756779",
      "MPAN Start Date": "2025-06-25",
      "MPAN End Date": "2049-06-26",
      "MPAN Consent": [
        {
          "MPAN Consent UUID": 1000000000000004,
          "MPAN Import Consent": "True",
          "MPAN Export Consent": "False",
          "MPAN Consent Start Date": "2025-06-25",
          "MPAN Consent End Date": "2049-06-26"
        }
      ]
    }
  ]
}

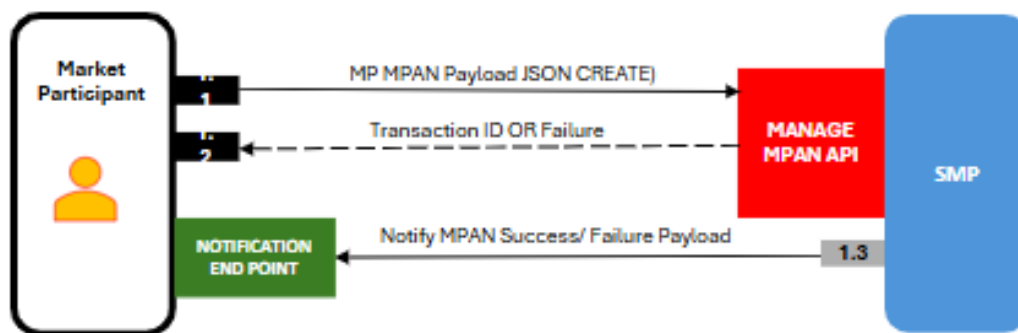
```

## Update MPAN Pairs

### Overview

| #   | Dataflow                 | Transfer Type | Payload           |
|-----|--------------------------|---------------|-------------------|
| 1.1 | Submit Asset Transaction | Request       | JSON MPAN Payload |

|     |                      |          |                                                                                                                                                                         |
|-----|----------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.2 | Transaction Response | Response | One of: <ul style="list-style-type: none"> <li>Failed Data Validation</li> <li>Transaction ID</li> </ul>                                                                |
| 1.3 | Notification         | Request  | Asset Transaction JSON file providing: <ul style="list-style-type: none"> <li>Successful records with SMP Asset ID</li> <li>Unsuccessful records with errors</li> </ul> |



## Specification

### Request

The request is a simple JSON payload made up of 2 sections:

| Key                                                                                                                            | Value                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| {<br><Notify Block>,<br><br>"MPAN Pairs":<br>[<br>{<Create MPAN Pair>},<br>"MPAN Consent"<br>{<Create MPAN Consent>}<br>]<br>} | Information required for SMP API to notify of transaction completion – see “Model – Notify” for key-value pairs contained in <Notify Block><br><br>Section containing information on the MPAN Pairs & Consent to be updated in SMP .It will consist of one or more instance of <Update MPAN Pairs>. See “Model – Update MPAN Pairs” for key-value pairs. |

## Response

A successful response is a JSON payload made up of 2 sections

```
{
  <Transaction Block>,      Information to notify of transaction information – see “Model –
                             Transaction” for key-value pairs contained in <Transaction Block>

  "MPAN Pairs":             Optional Section containing information on the MPAN Pairs and
  [                          Consents to be updated in SMP.It will consist of one or more
    {<Create MPAN Pair>},    instance of <MPAN Pair Block>. See “Model – Update MPAN Pair” for
    "MPAN Consent"          key-value pairs.
    {<Create MPAN
    Consent>}
  ]
}
```

## Notify

After an Update MPAN Pair transaction has completed, the resulting notification will consist of a JSON payload

```
{
  <Transaction Block>,      Information to notify of transaction information – see “Model
                             – Transaction” for key-value pairs contained in <Transaction
                             Block>

}
```

## Payload Models

### Model – Notify

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                   | Data Type | Example                         | Allowed Values / Pattern | Other Validation Rule |
|-----|-----------------------|-----------|---------------------------------|--------------------------|-----------------------|
| M   | Notification Address  | Text(255) | https://api.myco.com/SMPNotify/ |                          |                       |
| O   | Notification Username | Text(255) | MyUsername                      |                          |                       |
| O   | Notification Password | Text(255) | MyPassword                      |                          |                       |

### Model – Update MPAN Pair

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag       | Data Type    | Example          | Allowed Values / Pattern | Other Validation Rule                                                                                                                       |
|-----|-----------|--------------|------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| M   | MPAN UUID | Number(15,0) | 1000000000000001 |                          | Must be the MPAN UUID associated with an Asset owned or managed by the user's account. This is obtainable through the Select MPAN Pair API. |
| M   | Asset ID  | Text(15)     | 0000199306       |                          | Must be the Asset ID of an Asset owned or managed by the user's account. This is obtainable through the Select Asset API.                   |



|   |                     |                   |                  |             |                                                                                                                                                                         |
|---|---------------------|-------------------|------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| O | MPAN Import         | Text(13)          | 1127146756189    |             | Must be 13 digits long (MPANs) or 4 digits long (MSIDs). At least one of MPAN Import or MPAN Export values must be given.                                               |
| O | MPAN Export         | Text(13)          | 1123614756880    |             | Must be 13 digits long (MPANs) or 4 digits long (MSIDs). At least one of MPAN Import or MPAN Export values must be given.                                               |
| M | MPAN Start Date     | Date (YYYY-MM-DD) | 2025-10-20       |             | Must be today or later                                                                                                                                                  |
| M | MPAN End Date       | Date (YYYY-MM-DD) | 2025-10-20       |             | Must be today or later                                                                                                                                                  |
| M | MPAN Consent UUID   | Number(15,0)      | 1000000000000002 |             | Must be the MPAN Consent UUID associated with an Asset owned or managed by the user's account. This is obtainable through the Select MPAN Pair API.                     |
| O | MPAN Import Consent | Text (5)          | True             | True, False | Mandatory if value for 'MPAN Import' is present. Indicates consent to SVAA sharing the metered data applicable to this asset with the Supplier, as detailed by the BSC. |
| O | MPAN Export Consent | Text (5)          | True             | True, False | Mandatory if value for 'MPAN Export' is present. Indicates consent to SVAA sharing                                                                                      |

|   |                         |                   |            |                                                                                      |
|---|-------------------------|-------------------|------------|--------------------------------------------------------------------------------------|
|   |                         |                   |            | the metered data applicable to this asset with the Supplier, as detailed by the BSC. |
| M | MPAN Consent Start Date | Date (YYYY-MM-DD) | 2025-10-20 | Must be today or later                                                               |
| M | MPAN Consent End Date   | Date (YYYY-MM-DD) | 2025-10-20 | Must be today or later                                                               |

## Model – Transaction

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                | Data Type | Example           | Allowed Values                | Other Validation Rule                          |
|-----|--------------------|-----------|-------------------|-------------------------------|------------------------------------------------|
| O   | Transaction ID     | Text(10)  | CL-0000000143     |                               | Will be null if payload fails basic validation |
| M   | Transaction Status | Text(10)  | Load Completed    | See Transaction State Diagram |                                                |
| M   | Transaction Type   | Text(10)  | MPAN Pair Consent | “MPAN Pair Consent”           |                                                |
| M   | Action Type        | Text(10)  | Create            | “Create”                      |                                                |

## Payload Samples

### Request

Up to 3 MPAN Pairs can be specified per Asset. Every MPAN Pair must have a corresponding MPAN Consent record.

```
{
  "Notification Address": "HTTPS://www.callback.xyztestenergy.co.uk",
  "Notification Username": "XYZ Test Energy",
  "Notification Password": "*****",
  "Action Type": "Update",
  "MPAN Pairs": [
    {
      "Asset ID": "0000101600",
      "MPAN UUID": 1000000000000001,
      "MPAN Import": "1123456756700",
      "MPAN Export": "1123456756701",
      "MPAN Start Date": "2025-06-25",
      "MPAN End Date": "2025-06-30",
      "MPAN Consent": [
        {
          "MPAN Consent UUID": 1000000000000002,
          "MPAN Import Consent": "True",
          "MPAN Export Consent": "False",
          "MPAN Consent Start Date": "2025-06-25",
          "MPAN Consent End Date": "2025-06-26"
        },
        {
          "MPAN Consent UUID": 1000000000000010,
          "MPAN Import Consent": "True",
          "MPAN Export Consent": "True",
          "MPAN Consent Start Date": "2025-06-27",
          "MPAN Consent End Date": "2025-06-30"
        }
      ]
    },
    {
      "Asset ID": "0000101655",
      "MPAN UUID": 1000000000000003,
      "MPAN Export": "1123456756770",
      "MPAN Start Date": "2025-08-25",
      "MPAN End Date": "2026-06-26",
      "MPAN Consent": [
        {
          "MPAN Consent UUID": 1000000000000007,
          "MPAN Import Consent": "True",
          "MPAN Export Consent": "False",
          "MPAN Consent Start Date": "2025-08-25",
          "MPAN Consent End Date": "2025-12-31"
        },
        {
          "MPAN Consent UUID": 1000000000000023,
          "MPAN Import Consent": "True",
          "MPAN Export Consent": "True",
          "MPAN Consent Start Date": "2026-01-01",
          "MPAN Consent End Date": "2026-06-26"
        }
      ]
    }
  ]
}
```

## Response - Success

```
{
  "Transaction ID": "CL-0000000300",
  "Transaction Status": "Load Completed",
  "Transaction Type": "MPAN Pair Consent",
  "Action Type": "Update"
}
```

## Response - Failure

```
{
  "Transaction ID": "CL-0000000300",
  "Transaction Status": "Load Failed",
  "Transaction Type": "MPAN Pair Consent",
  "Action Type": "Update",
  "MPAN Pairs": [
    {
      "Asset ID": "0000101618",
      "MPAN UUID": 1000000000000001,
      "MPAN Import": "1123456756789",
      "MPAN Export": "1123456756790",
      "Error Message": "MPAN End Date is Missing",
      "MPAN Consent": [
        {
          "Asset ID": "0000101618",
          "MPAN Consent UUID": 1000000000000002,
          "MPAN Import Consent": "True",
          "MPAN Export Consent": "True",
          "Error Message": "MPAN Consent End Date is Missing"
        }
      ]
    }
  ]
}
```

## Notification - Failure

```
{
  "Transaction ID": "CL-0000000798",
  "Transaction Status": "Process Error",
  "Transaction Type": "MPAN Pair Consent",
  "Action Type": "Update",
  "MPAN Pairs": [
    {
      "Asset ID": "0000101618",
      "MPAN UUID": 1000000000000001,
      "MPAN Import": "1123456756789",
      "MPAN Export": "1123456756790",
      "Error Message": "MPAN Pair: Missing Mandatory Field",
      "MPAN Consent": [
        {
          "Asset ID": "0000101618",
          "MPAN Consent UUID": 1000000000000002,
          "MPAN Import Consent": "True",
          "MPAN Export Consent": "False",
          "Error Message": "MPAN Consent End Date is Missing"
        }
      ]
    }
  ],
  {
    "Asset ID": "0000101618",

```

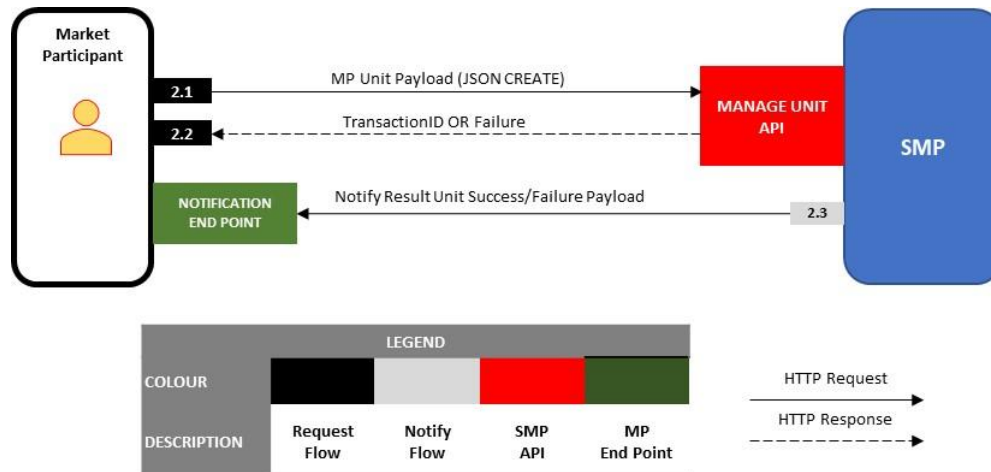
```
"MPAN UUID": 1000000000000003,  
"MPAN Import": "1123456756789",  
"MPAN Export": "1123456756790",  
"Error Message": "null",  
"MPAN Consent": [  
  {  
    "Asset ID": "0000101618",  
    "MPAN Consent UUID": 1000000000000004,  
    "MPAN Import Consent": "True",  
    "MPAN Export Consent": "False",  
    "Error Message": "null"  
  }  
]  
}  
}]}
```

## Notification - Success

```
{  
  "Transaction ID": "CL-0000000291",  
  "Transaction Status": "Process Completed",  
  "Transaction Type": "MPAN Pair Consent",  
  "Action Type": "Update"  
}
```

# API: Create Unit

## Overview



| #   | Dataflow                | Transfer Type | Payload                                                                                                                                                               |
|-----|-------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.1 | Submit Unit Transaction | Request       | JSON Unit Payload                                                                                                                                                     |
| 2.2 | Transaction Response    | Response      | One of: <ul style="list-style-type: none"> <li>Failed Data Validation</li> <li>Transaction ID</li> </ul>                                                              |
| 2.3 | Notification            | Request       | Unit Transaction JSON file providing: <ul style="list-style-type: none"> <li>Successful records with SMP Unit ID</li> <li>Unsuccessful records with errors</li> </ul> |

## Specification

### Request

The request is a simple JSON payload made up of 2 sections:

| Key                                                                                                                                                                    | Value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <pre>{   &lt;Notify Block&gt;,    "Unit":   {     &lt;Create Unit&gt;,     "Assets":     [       &lt;Asset ID&gt;,       &lt;Asset ID&gt;,       ...     ]   } }</pre> | <p>Information required for SMP API to notify of transaction completion – see “Model – Notify” for key-value pairs contained in &lt;Notify Block&gt;</p> <p>Section containing information on the Unit to be loaded into SMP. It will consist of one instance &lt;Create Unit&gt;. See “Model – Create Unit” for key-value pairs.</p> <p>“Complementary to this will be an Array of the Asset IDs which refer to the Assets to be included in the unit. All Assets must have associated MPAN Pair records created – see Create MPAN Pairs section for more detail. This array does not need to be provided if the</p> |

```

    }
    Applicable Market is Demand Flexibility Service as the assets will be
    created automatically.
    If the Unit Category = Primary BMU, Secondary BMU or Additional
    Supplier BMU the user will need to include additional information
    relating to Balancing Mechanism registration. See the payload model
    and sample payload for details.
  }

```

## Response

A successful response is a JSON payload

```

{
  <Transaction Block>,    Information to notify of transaction information – see “Model –
                          Transaction” for key-value pairs contained in <Transaction Block>
}

```

## Notify

After a Create Unit transaction has completed, the resulting notification will consist of a JSON payload

```

{
  <Transaction Block>    Information to notify of transaction information – see “Model –
                          Transaction” for key-value pairs contained in <Transaction Block>
}

```

## Payload Models

### Model – Notify

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                   | Data Type | Example                         | Allowed Values / Pattern | Other Validation Rule                                                                              |
|-----|-----------------------|-----------|---------------------------------|--------------------------|----------------------------------------------------------------------------------------------------|
| M   | Notification Address  | Text(255) | https://api.myco.com/SMPNotify/ |                          |                                                                                                    |
| O   | Notification Username | Text(255) | MyUsername                      |                          |                                                                                                    |
| O   | Notification Password | Text(255) | MyPassword                      |                          |                                                                                                    |
| O   | hasMore               | Boolean   | True                            | true, false              | If selected as “true”, User will be able to submit another payload as part of the same transaction |

The use of ‘hasMore’ is intended to give the user the option to submit multiple payloads for the same transaction, to be used if the number of records in one payload exceeds the limits for the amount that can be processed. Currently we advise including hasMore as ‘True’ if the number of assets in the payload for the Unit exceeds 50,000. For the final payload in the transaction ‘hasMore’ must be specified as ‘false’ in order for the transaction to be processed.

### Model – Create Unit

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag               | Data Type | Example            | Allowed Values                       | Other Validation Rule |
|-----|-------------------|-----------|--------------------|--------------------------------------|-----------------------|
| M   | Unit Name         | Text(80)  |                    |                                      | Must be unique        |
| M   | Applicable Market | Picklist  | Balancing Services | See Appendix Picklist – Unit Markets |                       |



|                                    |                     |                        |             |                                    |                                                                                                                                           |
|------------------------------------|---------------------|------------------------|-------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| See Appendix Picklist – Unit Types |                     |                        |             |                                    |                                                                                                                                           |
| M                                  | Unit Type           | Picklist(Multi-Select) | Demand Unit |                                    | If Applicable Market = “Demand Flexibility Service” then must be “Demand Unit”                                                            |
| M                                  | Category            | Picklist               | Primary BMU | See Appendix Picklist – Categories | If Applicable Market = “Demand Flexibility Service” then must be “Non-BMU”                                                                |
| M                                  | Effective From Date | Date                   | 2025-10-28  | YYYY-MM-DD                         | Must be today or later                                                                                                                    |
| M                                  | Fuel Type           | Picklist               | Batteries   | See Appendix Picklist – Fuel Types | If Applicable Market = “Demand Flexibility Service” then must be “Load Response”                                                          |
| O                                  | Generation Capacity | Number(15, 3)          | 297         | XXXXXXXXXXXXXXXX.YY                | Unit:<br>Mandatory if “Unit Type” = “Generation Unit”.<br><br>Not applicable If Applicable Market = “Demand Flexibility Service”          |
| O                                  | Demand Capacity     | Number(15, 3)          | 228         | XXXXXXXXXXXXXXXX.YY                | Unit:<br>Mandatory if “Unit Type” = “Demand Unit”.<br><br>Must be between ‘1’ and ‘100’ if Applicable Market = Demand Flexibility Service |

|   |                                    |            |                     |                                                           |                                                                       |
|---|------------------------------------|------------|---------------------|-----------------------------------------------------------|-----------------------------------------------------------------------|
| O | Customer Base                      | Picklist   | Domestic            | <b>See Appendix Picklist – Customer Base</b>              | Only required if Applicable Market = "Demand Flexibility Service"     |
| O | Delivery Method                    | Text (100) | My Delivery Method  |                                                           | Only required if Applicable Market = "Demand Flexibility Service"     |
| M | Connection Type                    | Picklist   | Flexible            | <b>See Appendix Picklist – Connection Type</b>            | Not applicable If Applicable Market = "Demand Flexibility Service"    |
| M | Connected to DNO                   | Picklist   | true                | <b>See Appendix Picklist – Boolean</b>                    | If Applicable Market = "Demand Flexibility Service" then must be true |
| O | DNO                                | Picklist   | SP Energy Networks  | <b>See Appendix Picklist - DNO</b>                        | Mandatory if "Connected to DNO" = true                                |
| O | Are you a Supplier of Electricity? | Picklist   | Yes, No             | See Appendix Picklist – Are you a Supplier of Electricity | Only required if Applicable Market = "Demand Flexibility Service"     |
| O | DFS Initiation Measures            | Picklist   | Manually instructed | See Appendix Picklist – DFS Initiation Measures           | Only required if Applicable Market = "Demand Flexibility Service"     |
| O | DFS Unit Type                      | Picklist   | Domestic            | See Appendix Picklist – DFS Unit Type                     | Only required if Applicable Market = "Demand Flexibility Service"     |

|   |                          |              |           |                                                        |                                                                                                                                                                    |
|---|--------------------------|--------------|-----------|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| O | Connection Point Voltage | Picklist     | 400       | See Appendix<br>Picklist – Connection<br>Point Voltage | Unit: KV<br>Mandatory If<br>Applicable Market =<br>“Balancing Services”<br>Not applicable If<br>Applicable Market =<br>“Demand Flexibility<br>Service”             |
| O | Postcode                 | Text(8)      | RG1 2HT   |                                                        | Mandatory If<br>Applicable Market =<br>“Balancing Services”<br>Not applicable If<br>Applicable Market =<br>“Demand Flexibility<br>Service”                         |
| O | Latitude                 | Number(2,15) | -3.584902 | +/-<br>XXX.XXXXXXXXXXXXXXX                             | Accepts -90 to +90<br>Mandatory If Applicable<br>Market = “Balancing<br>Services”<br>Not applicable If<br>Applicable Market =<br>“Demand Flexibility<br>Service”   |
| O | Longitude                | Number(3,15) | 51.707079 | +/-<br>XX.XXXXXXXXXXXXXXX                              | Accepts -180 to +180<br>Mandatory If Applicable<br>Market = “Balancing<br>Services”<br>Not applicable If<br>Applicable Market =<br>“Demand Flexibility<br>Service” |
| O | Nearest Node             | Text(6)      | abha      |                                                        | Mandatory If Applicable<br>Market = “Balancing<br>Services”                                                                                                        |

|   |                                     |                             |                                                      |                                                |                                                                                                                                            |
|---|-------------------------------------|-----------------------------|------------------------------------------------------|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                     |                             |                                                      |                                                | Not applicable If<br>Applicable Market =<br>“Demand Flexibility<br>Service”                                                                |
| O | GSP                                 | Picklist (Multi-<br>Select) | ABHA_1                                               | See Appendix Picklist -<br>GSP                 | Mandatory If Applicable<br>Market = “Balancing<br>Services”<br>Not applicable If<br>Applicable Market =<br>“Demand Flexibility<br>Service” |
| O | Other GSP                           | Text(10)                    | New GSP                                              |                                                | Mandatory if “GSP” =<br>“Others”                                                                                                           |
| O | GSP Group                           | Picklist                    | Eastern England                                      | See Appendix Picklist –<br>GSP Group           | Mandatory If Applicable<br>Market = “Balancing<br>Services”<br>Not applicable If<br>Applicable Market =<br>“Demand Flexibility<br>Service” |
| O | Primary Despatch Email<br>Address   | Email                       | <a href="mailto:hello@email.com">hello@email.com</a> |                                                | Mandatory if “Applicable<br>Market” = “Demand<br>Flexibility Service”                                                                      |
| O | Primary Despatch Phone<br>Country   | Picklist                    | United Kingdom                                       | See Appendix - Picklist<br>Country (Telephone) |                                                                                                                                            |
| M | Primary Despatch Phone<br>Number    | Text(10)                    | 7554456564                                           |                                                |                                                                                                                                            |
| O | Secondary Despatch Email<br>Address | Email                       | <a href="mailto:hello@email.com">hello@email.com</a> |                                                | Mandatory if “Applicable<br>Market” = “Demand<br>Flexibility Service”                                                                      |
| O | Secondary Despatch Phone<br>Country | Picklist                    | United Kingdom                                       | See Appendix - Picklist<br>Country (Telephone) |                                                                                                                                            |
| O | Secondary Despatch Phone<br>Number  | Text(10)                    | 7676567657                                           |                                                |                                                                                                                                            |

|   |                                     |          |                                                      |                                                                                                                               |
|---|-------------------------------------|----------|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| O | Despatch Fax Number<br>Country      | Picklist | United Kingdom                                       | See Appendix - Picklist<br>Country (Telephone)                                                                                |
| O | Despatch Fax Number                 | Text(10) | 7554456564                                           |                                                                                                                               |
| O | Application Contact Name            | Text(80) | John Hill                                            | Mandatory if Category =<br>Primary BMU,<br>Secondary BMU,<br>Additional Supplier<br>BMU. Not allowed if<br>Category = Non-BMU |
| O | Application Contact Email           | Email    | <a href="mailto:hello@email.com">hello@email.com</a> | Mandatory if Category =<br>Primary BMU,<br>Secondary BMU,<br>Additional Supplier<br>BMU. Not allowed if<br>Category = Non-BMU |
| O | Application Contact Number          | Phone    | 7554456564                                           | Mandatory if Category =<br>Primary BMU,<br>Secondary BMU,<br>Additional Supplier<br>BMU. Not allowed if<br>Category = Non-BMU |
| O | Application Contact Country         | Text(40) | United Kingdom                                       | Mandatory if Category =<br>Primary BMU,<br>Secondary BMU,<br>Additional Supplier<br>BMU. Not allowed if<br>Category = Non-BMU |
| O | Application Contact Country<br>Code | Text(10) | 44                                                   | Mandatory if Category =<br>Primary BMU,<br>Secondary BMU,<br>Additional Supplier<br>BMU. Not allowed if<br>Category = Non-BMU |

|   |                                        |                    |                |         |                                                                                                                |
|---|----------------------------------------|--------------------|----------------|---------|----------------------------------------------------------------------------------------------------------------|
| O | Manned Location Telephone Number       | Phone              | 7554456564     |         |                                                                                                                |
| O | Manned Location Telephone Country      | Text(40)           | United Kingdom |         |                                                                                                                |
| O | Manned Location Telephone Country Code | Text(10)           | 44             |         |                                                                                                                |
| O | DNO Connection Point                   | Text(255)          | ABC            |         |                                                                                                                |
| O | FPN Flag                               | Picklist (Yes; No) | Yes            | Yes; No | Mandatory if Category = Primary BMU, Secondary BMU, Additional Supplier BMU. Not allowed if Category = Non-BMU |
| O | EIC Resource Code (Type W)             | Text(16)           | ABC            |         | Not allowed if Category = Non-BMU                                                                              |

### Model – Create Unit BM Registration Information

| M/O | Tag              | Data Type     | Example   | Allowed Values | Other Validation Rule                                                                |
|-----|------------------|---------------|-----------|----------------|--------------------------------------------------------------------------------------|
| O   | Control Point ID | Formula(Text) | CP-000007 |                | Control Point Must be in Submitted or Accepted Status. NESO BM Registration Team can |

|   |                             |               |           |                      |                                                                                                                                          |
|---|-----------------------------|---------------|-----------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------|
|   |                             |               |           |                      | supply Control<br>Point IDs                                                                                                              |
| O | Trading Agent ID            | Formula(Text) | TA-000009 |                      | Trading Agent<br>Must be in<br>Submitted or<br>Accepted<br>Status. NESO<br>BM<br>Registration<br>Team can<br>supply Trading<br>Agent IDs |
| O | Elexon Unit Settlement Id   | Text (11)     | No        |                      |                                                                                                                                          |
| O | BM Contract Type            | Picklist      | BEGA      | BELLA; BEGA; BCA; NA |                                                                                                                                          |
| O | Control Telephony Installed | Picklist      | Yes       | Yes; No              |                                                                                                                                          |

|   |                                |           |                |         |                                                         |
|---|--------------------------------|-----------|----------------|---------|---------------------------------------------------------|
| O | Control Telephony Number       | Text (40) | 1234567890     |         | Mandatory only if 'Control Telephony Installed' = 'Yes' |
| O | Control Telephony Country      | Text (40) | United Kingdom |         | Mandatory only if 'Control Telephony Installed' = 'Yes' |
| O | Control Telephony Country Code | Text (10) | 44             |         | Mandatory only if 'Control Telephony Installed' = 'Yes' |
| O | System Telephony Installed     | Picklist  | Yes            | Yes; No |                                                         |
| O | System Telephony Number        | Text (40) | 1234567890     |         | Mandatory only if 'System Telephony Installed' = 'Yes'  |
| O | System Telephony Country       | Text (40) | United Kingdom |         | Mandatory only if 'System Telephony Installed' = 'Yes'  |
| O | System Telephony Country Code  | Text (10) | 44             |         | Mandatory only if 'System Telephony Installed' = 'Yes'  |
| O | Connected via OFTO             | Picklist  | Yes            | Yes; No |                                                         |



|   |                                     |            |                |                                         |
|---|-------------------------------------|------------|----------------|-----------------------------------------|
| O | OFTO Control Point Building Name    | Text (100) | CP Name        | Only If<br>'Connected<br>via OFTO' =Yes |
| O | OFTO Control Point Street           | Text (100) | CP Street      | Only If<br>'Connected<br>via OFTO' =Yes |
| O | OFTO Control Point City             | Text (50)  | CP City        | Only If<br>'Connected<br>via OFTO' =Yes |
| O | OFTO Control Point Post Code        | Text (10)  | ABC123         | Only If<br>'Connected<br>via OFTO' =Yes |
| O | OFTO Control Point County           | Text (50)  | CP County      | Only If<br>'Connected<br>via OFTO' =Yes |
| O | OFTO Control Point Country          | Text (50)  | United Kingdom | Only If<br>'Connected<br>via OFTO' =Yes |
| O | OFTO Manager Name                   | Text (150) | Samual Smith   | Only If<br>'Connected<br>via OFTO' =Yes |
| O | OFTO Manager Email                  | Email (80) | XYZ@mail.com   | Only If<br>'Connected<br>via OFTO' =Yes |
| O | OFTO Manager Telephone              | Text (40)  | 1234567890     | Only If<br>'Connected<br>via OFTO' =Yes |
| O | OFTO Manager Telephone Country      | Text (40)  | United Kingdom | Only If<br>'Connected<br>via OFTO' =Yes |
| O | OFTO Manager Telephone Country Code | Text (10)  | 44             | Only If<br>'Connected<br>via OFTO' =Yes |

|   |                                          |            |                |                                   |
|---|------------------------------------------|------------|----------------|-----------------------------------|
| O | OFTO Joint System Telephone Number       | Text (40)  | 1234567890     | Only If 'Connected via OFTO' =Yes |
| O | OFTO Joint System Telephone Country      | Text (40)  | United Kingdom | Only If 'Connected via OFTO' =Yes |
| O | OFTO Joint System Telephone Country Code | Text (10)  | 44             | Only If 'Connected via OFTO' =Yes |
| O | eGAMA Party Name                         | Text (150) | Samuel Smith   |                                   |
| O | eGAMA Party Building Name                | Text (100) | Building Name  |                                   |
| O | eGAMA Party Street                       | Text (100) | Street         |                                   |
| O | eGAMA Party City                         | Text (50)  | City           |                                   |
| O | eGAMA Party Post Code                    | Text (10)  | XYZ123         |                                   |
| O | eGAMA Party County                       | Text (50)  | Breshy         |                                   |
| O | eGAMA Party Country                      | Text (50)  | United Kingdom |                                   |
| O | eGAMA Contact Name                       | Text (150) | Joseph Kay     |                                   |
| O | eGAMA Contact Telephone Number           | Text (40)  | 1234567890     |                                   |
| O | eGAMA Contact Telephone Country          | Text (40)  | United Kingdom |                                   |

|   |                                            |                |               |           |                                                                                   |
|---|--------------------------------------------|----------------|---------------|-----------|-----------------------------------------------------------------------------------|
| O | eGAMA Contact Telephone<br>Country Code    | Text (10)      | 44            |           |                                                                                   |
| O | eGAMA Contact Email                        | Email (80)     | mail@mail.com |           |                                                                                   |
| O | Is SAA Metering capacity being<br>used?    | Picklist       | Yes           | (Yes; No) | Only if Unit<br>category is<br>Secondary<br>BMU and<br>Additional<br>Supplier BMU |
| O | SAA Max Deliverable Demand<br>Capacity     | Number (15, 3) | 20            |           | Only if 'Is SAA<br>Metering<br>capacity being<br>used'=Yes                        |
| O | SAA Max Deliverable Generation<br>Capacity | Number (15, 3) | 20            |           | Only if 'Is SAA<br>Metering<br>capacity being<br>used'=Yes                        |
| O | SAA Nameplate Capacity                     | Number (15, 3) | 40            |           | Only if 'Is SAA<br>Metering<br>capacity being<br>used'=Yes                        |

## Model – Unit

This Model includes all fields in Model – Create Unit plus the following:

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload.

| M/O | Tag           | Data Type | Example    | Allowed Values / Pattern | Other Validation Rule |
|-----|---------------|-----------|------------|--------------------------|-----------------------|
| O   | Account Name  | Text(255) | My Company |                          |                       |
| O   | Error Message | Long Text |            | O                        | Error Message         |

## Model – Transaction

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                | Data Type | Example           | Allowed Values                | Other Validation Rule                          |
|-----|--------------------|-----------|-------------------|-------------------------------|------------------------------------------------|
| O   | Transaction ID     | Text(10)  | CL-0000000143     |                               | Will be null if payload fails basic validation |
| M   | Transaction Status | Text(10)  | Process Completed | See Transaction State Diagram |                                                |
| M   | Transaction Type   | Text(10)  | Asset             | “Asset”, “Unit”               |                                                |
| M   | Action Type        | Text(10)  | Create            | “Create”                      |                                                |

## Payload Samples

### Request

#### Example 1: Non-Balancing Mechanism Unit

```
{
  "Notification Address":"https://api.mycompany.com/SMPNotification",
  "Notification Username":"MyUsername",
  "Notification Password":"MyPassword",
  "Action Type":"Create",
  "Unit":
  {
    "Unit Name":"MyUnit-01",
    "Applicable Market":"Balancing Services",
    "Unit Type":"Generation Unit",
    "Category":"Non-BMU",
    "Effective From Date":"2023-03-01",
    "Fuel Type":"Batteries",
    "Generation Capacity":297,
    "Connection Type":"Flexible",
    "Connected to DNO":true,
    "DNO":"Electricity North West",
    "Connection Point Voltage":"400",
    "Postcode":"CV34 6DA",
    "Longitude":"-3.584902",
    "Latitude":"51.707079",
    "Nearest Node":"abha",
    "GSP":"ABHA_1",
    "GSP Group":"Eastern England",
    "Primary Despatch Phone Number":"7554456564",
    "Primary Despatch Phone Number Country":"United Kingdom",
    "Secondary Despatch Phone Number":"7676567657",
    "Secondary Despatch Phone Number Country":"United Kingdom",
    "Despatch Fax Number":"4645654643",
    "Despatch Fax Number Country":"United Kingdom",
    "Assets":[7294652834,"8273624319","6244855231"]
  }
}
```

## Example 2: -Balancing Mechanism Unit

```
{
  "Notification Address": "https://api-dev-int-uk-01.nationalgrid.com/smp-mock-testing/api/v1/sample",
  "Notification Username": "smpdummyuser",
  "Notification Password": "smpdummyuser",
  "Action Type": "Create",
  "Unit": {
    "Assets": ["0000127343"],
    "Unit Name": "SMPAPI_Unit_Bal_BMU04",
    "Applicable Market": "Balancing Services",
    "Unit Type": "Generation Unit;Demand Unit",
    "Effective From Date": "2025-08-29",
    "Category": "Primary BMU",
    "Fuel Type": "Other",
    "Other Fuel Type": "AVV",
    "FPN Flag": "No",
    "Generation Capacity": 20.0,
    "Demand Capacity": 20.0,
    "Customer Base": "Domestic",
    "Connection Type": "Flexible",
    "Connected to DNO": true,
    "DNO": "ESB Networks",
    "Connection Point Voltage": "400",
    "Other Connection Point Voltage": 50.0,
    "Postcode": "RG1 7QE",
    "Longitude": "-3.584902",
    "Latitude": "51.707079",
    "Nearest Node": "abha",
    "GSP": "ABHA_1;Others",
    "Other GSP": "ABD_1",
    "GSP Group": "Eastern England",
    "Primary Despatch Email Address": "Contact@xyztestenergy.co.uk",
    "Primary Despatch Phone Country": "United Kingdom",
    "Primary Despatch Phone Number": "7554456564",
    "Secondary Despatch Email Address": "Contact2@xyztestenergy.co.uk",
    "Secondary Despatch Phone Country": "United Kingdom",
    "Secondary Despatch Phone Number": "7676567657",
    "Despatch Fax Number Country": "United Kingdom",
    "Despatch Fax Number": "4645654643",
    "Supplier of Electricity": "Yes",
```

```
"Application Contact Name": "John Smith",
"Application Contact Email": "John.smith@nationalgrid.com",
"Application Contact Number": "1212121212",
"Application Contact Country": "United Kingdom",
"Application Contact Country Code": "44",
"Manned Location Telephone Number": "1234567890",
"Manned Location Telephone Country": "United Kingdom",
"Manned Location Telephone Country Code": "44",
"DNO Connection Point": "ABC",
"EIC Resource Code (Type W)": "ABC",
"BM Registration": {
  "Control Point ID": "",
  "Trading Agent ID": "",
  "BM Contract Type": "BELLA",

  "Elexon Unit Settlement Id": "No",
  "Connected via OFTO": "Yes",
  "OFTO Control Point Building Name": "CP Name",
  "OFTO Control Point Street": "CP Street",
  "OFTO Control Point City": "CP City",
  "OFTO Control Point Post Code": "ABC123",
  "OFTO Control Point County": "CP County",
  "OFTO Control Point Country": "United Kingdom",
  "OFTO Manager Name": "Smual Smith",
  "OFTO Manager Email": "XYZ@mail.com",
  "OFTO Manager Telephone": "1234567890",
  "OFTO Manager Telephone Country": "United Kingdom",
  "OFTO Manager Telephone Country Code": "44",
  "OFTO Joint System Telephone Number": "1234567890",
  "OFTO Joint System Telephone Country": "United Kingdom",
  "OFTO Joint System Telephone Country Code": "44",
  "eGAMA Party Name": "Samuel Smith",
  "eGAMA Party Building Name": "Building Name",
  "eGAMA Party Street": "Street",
  "eGAMA Party City": "City",
  "eGAMA Party Post Code": "XYZ123",
  "eGAMA Party County": "Breshy",
  "eGAMA Party Country": "United Kingdom",
  "eGAMA Contact Name": "Joseph Kay",
  "eGAMA Contact Telephone Number": "1234567890",
  "eGAMA Contact Telephone Country": "United Kingdom",
  "eGAMA Contact Telephone Country Code": "44",
  "eGAMA Contact Email": "mail@mail.com"
```

```
}  
}  
}
```

### Response - Success

```
{  
  "Transaction ID":" CL-0000000143",  
  "Transaction Status":"Load Completed",  
  "Transaction Type":"Unit",  
  "Action Type":"Create"  
}
```

### Response - Failure

```
{  
  "Transaction ID":null,  
  "Transaction Status":"Load Failed",  
  "Transaction Type":"Unit",  
  "Action Type":"Create",  
  "Unit":  
  {  
    "Unit Name":"MyUnit-01",  
    "Error Message":"Postcode: Missing Mandatory Field"  
  }  
}
```

### Notification - Failure

```
{
```



```
{
  "Transaction ID": "CL-0000001183",
  "Transaction Status": "Process Error",
  "Transaction Type": "Unit",
  "Action Type": "Create",
  "Unit": {
    "Unit Name": "My Unit 01",
    "Error Message": null
  },
  "BM Registration": {
    "Error Message": "Please enter a valid Trading Agent ID;Please enter a valid Control Point ID"
  }
}
```

## Notification - Success

```
{
  "Transaction ID": "CL-0000000143",
  "Transaction Status": "Process Completed",
  "Transaction Type": "Unit",
  "Action Type": "Create",
}
```

## API: Select Unit

### Overview

| # | Dataflow | Transfer Type | Payload |
|---|----------|---------------|---------|
|---|----------|---------------|---------|

|     |                      |          |                                                                                                                      |
|-----|----------------------|----------|----------------------------------------------------------------------------------------------------------------------|
| 3.1 | Submit Unit Request  | Request  |                                                                                                                      |
| 3.2 | Transaction Response | Response | <ul style="list-style-type: none"> <li>Transaction ID</li> </ul>                                                     |
| 3.3 | Notification         | Request  | Asset Transaction JSON file providing: <ul style="list-style-type: none"> <li>JSON file with Unit details</li> </ul> |

## Payload Samples

### Notification - Success

```
{
  "Transaction Type": "Unit"
  "Transaction Status": "Success"
  "Action Type": "Select",
  "Units":

[
  {
    "Unit Versions": [
      {
        "Unit Key": 2000000000000333,
        "Unit Name": "My unit 1",
        "Account Name": "ABC LTD",
        "Company ID": "13390812",
        "Company Unique Identifier": 10007733,
        "Unit ID": "22222",
        "Applicable Market": "Balancing Services",
        "Unit Type": "Demand Unit",
        "Unit Status": "Accepted",
        "Effective From Date": null,
        "Effective To Date": null,
        "Fuel Type": "Biomass",
        "Other Fuel Type": null,
        "Generation Capacity": 0,
        "Demand Capacity": 123456719012345.33,
        "Customer Base": null,
```

```
"Delivery Method": null,
"Connection Type": "Firm",
"Connected to DNO": false,
"DNO": null,
"Connection Point Voltage": "275",
"Other Connection Point Voltage": null,
"Postcode": "11111111",
"Longitude": "-3.584902",
"Latitude": "51.707079",
"Nearest Node": "ABC",
"GSP": "ABHA_1",
"Other GSP": null,
"GSP Group": "Eastern England",
"Primary Despatch Email Address": null,
"Secondary Despatch Email Address": null,
"Primary Despatch Phone Number": "1111111111",
"Primary Despatch Phone Country": "United Kingdom",
"Secondary Despatch Phone Number": "1111111111",
"Secondary Despatch Phone Country": "United Kingdom",
"Despatch Fax Number Country": null,
"Despatch Fax Number": "United Kingdom",
"Category": "Primary BMU",
"Supplier of Electricity": null,
"Application Contact Name": "John Smith",
"Application Contact Email": "John.smith@nationalgrid.com",
"Application Contact Number": "1212121212",
"Application Contact Country": "United Kingdom",
"Application Contact Country Code": "44",
"Manned Location Telephone Number": "1234567890",
"Manned Location Telephone Country": "United Kingdom",
"Manned Location Telephone Country Code": "44",
"DNO Connection Point": "ABC",
"EIC Resource Code (Type W)": "ABC",

"FPN Flag": "No",
"Assets": [
  "0000106753"
],
"Unit Services": [
  {
    "Active Network Management": "Yes",
    "Allocated Volume": 122,
    "Cease Time": 11,
```

```
        "Cease Time (s)": 1,
        "Time to Full Delivery (in mins)": 1,
        "Time to Full Delivery (s)": 10,
        "Maximum Utilisation Period": 11,
        "Minimum Non Zero Time": 11,
        "Operational Metering Available": "Yes",
        "Ramp Down Rate": null,
        "Ramp Up Rate": 0,
        "Recovery Period": 11,
        "Response Time": 1,
        "Response Time (s)": 10,
        "Minimum Activation Period": 1,
        "Service End Date": "2032-12-21 12:00:00",
        "Service Start Date": "2022-12-21 07:00:00",
        "Service Status": "Approved",
        "Unit of Measurement": "MW",
        "Telephony Available from": "00:30",
        "Telephony Available to": "00:30",
        "Service Provision": "Generator",
        "Service Name": "Negative Balancing Reserve",
        "Service Code": "NBR",
        "First Authorised Signatory": "Smith Jones",
        "Second Authorised Signatory": null,
        "Third Authorised Signatory": null
    }
]
},
{
    "Unit Key": 2000000000000444,
    "Unit Name": "Secondary Unit 12",
    "Name": "JAQUARD LTD",
    "Company ID": "11012159",
    "Company Unique Identifier": 10007725,
    "Unit ID": "AG-02C",
    "Applicable Market": "Balancing Services",
    "Unit Type": "Generation Unit;Demand Unit",
    "Unit Status": "Accepted",
    "Effective From Date": "2024-03-30",
    "Effective To Date": null,
    "Fuel Type": "Biomass",
    "Other Fuel Type": null,
    "Generation Capacity": 80,
    "Demand Capacity": 80,
```

```
"Customer Base": null,
"Delivery Method": null,
"Connection Type": "Firm",
"Connected to DNO": false,
"DNO": null,
"Connection Point Voltage": null,
"Other Connection Point Voltage": null,
"Postcode": null,
"Longitude": "-3.5904902",
"Latitude": "4.5904902",
"Nearest Node": null,
"GSP": "ABHA_1",
"Other GSP": null,
"GSP Group": "London",
"Primary Despatch Email Address": null,
"Secondary Despatch Email Address": null,
"Primary Despatch Phone Country": "United Kingdom",
"Primary Despatch Phone Number": "9876543210",
"Secondary Despatch Phone Country": "United Kingdom",
"Secondary Despatch Phone Number": "9876543210",
"Despatch Fax Number Country": null,
"Despatch Fax Number": null,
"Category": "Secondary BMU",
"Supplier of Electricity": null,
"Application Contact Name": "John Smith",
"Application Contact Email": "John.smith@nationalgrid.com",
"Application Contact Number": "1212121212",
"Application Contact Country": "United Kingdom",
"Application Contact Country Code": "44",
"Manned Location Telephone Number": "1234567890",
"Manned Location Telephone Country": "United Kingdom",
"Manned Location Telephone Country Code": "44",
"DNO Connection Point": "ABC",
"EIC Resource Code (Type W)": "ABC",

"FPN Flag": "No",
"Assets": [
  "0000106758"
],
"Unit Services": [
  {
    "Active Network Management": "Yes",
    "Allocated Volume": 122,
```

```

        "Cease Time": 11,
        "Cease Time (s)": 1,
        "Time to Full Delivery (in mins)": 1,
        "Time to Full Delivery (s)": 10,
        "Maximum Utilisation Period": 11,
        "Minimum Non Zero Time": 11,
        "Operational Metering Available": "Yes",
        "Ramp Down Rate": null,
        "Ramp Up Rate": 0,
        "Recovery Period": 11,
        "Response Time": 1,
        "Response Time (s)": 10,
        "Minimum Activation Period": 1,
        "Service End Date": "2032-12-21 12:00:00",
        "Service Start Date": "2022-12-21 07:00:00",
        "Service Status": "Approved",
        "Unit of Measurement": "MW",
        "Telephony Available from": null,
        "Telephony Available to": null,
        "Service Provision": null,
        "Service Name": "Dynamic Regulation HF",
        "Service Code": "DRH",
        "First Authorised Signatory": null,
        "Second Authorised Signatory": null,
        "Third Authorised Signatory": "Steve J"
    }
}
],
"BM Registrations": [
{
    "Unit Key": 2000000000000333,
    "Control Point ID": "demo123",
    "Trading Agent ID": "demo123",
    "BM Contract Type": "BELLA",
    "Elexon Unit Settlement Id": "No",
    "Control Telephony Installed": "Yes",
    "Control Telephony Number": "1234567890",
    "Control Telephony Country": "United Kingdom",
    "Control Telephony Country Code": "44",
    "System Telephony Installed": "Yes",
    "System Telephony Number": "1234567890",
    "System Telephony Country": "United Kingdom",

```

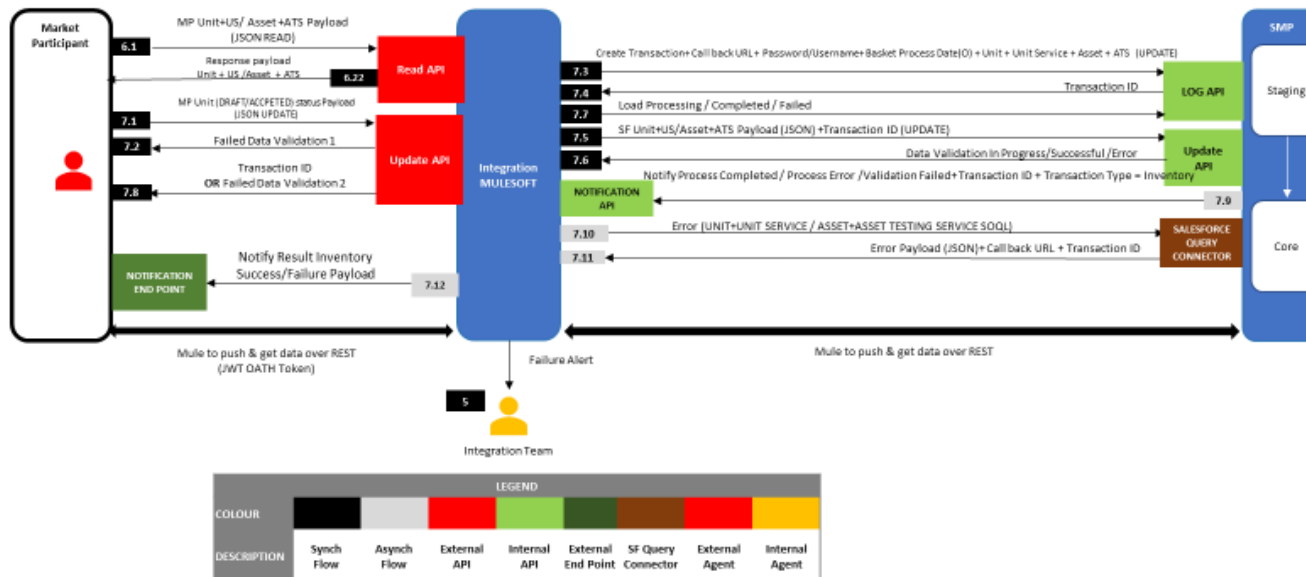
```
"System Telephony Country Code": "44",
"Connected via OFTO": "Yes",
"OFTO Control Point Building Name": "CP Name",
"OFTO Control Point Street": "CP Street",
"OFTO Control Point City": "CP City",
"OFTO Control Point Post Code": "ABC123",
"OFTO Control Point County": "CP County",
"OFTO Control Point Country": "United Kingdom",
"OFTO Manager Name": "Smual Smith",
"OFTO Manager Email": "XYZ@mail.com",
"OFTO Manager Telephone": "1234567890",
"OFTO Manager Telephone Country": "United Kingdom",
"OFTO Manager Telephone Country Code": "44",
"OFTO Joint System Telephone Number": "1234567890",
"OFTO Joint System Telephone Country": "United Kingdom",
"OFTO Joint System Telephone Country Code": "44",
"eGAMA Party Name": "Samuel Smith",
"eGAMA Party Building Name": "Building Name",
"eGAMA Party Street": "Street",
"eGAMA Party City": "City",
"eGAMA Party Post Code": "XYZ123",
"eGAMA Party County": "Breshy",
"eGAMA Party Country": "United Kingdom",
"eGAMA Contact Name": "Joseph Kay",
"eGAMA Contact Telephone Number": "1234567890",
"eGAMA Contact Telephone Country": "United Kingdom",
"eGAMA Contact Telephone Country Code": "44",
"eGAMA Contact Email": "mail@mail.com",
"Is SAA Metering capacity being used?": "Yes",
"SAA Max Deliverable Demand Capacity": 20,
"SAA Max Deliverable Generation Capacity": 20,
"SAA Nameplate Capacity": 40
},
{
  "Unit Key": 2000000000000333,
  "Control Point ID": "demo123",
  "Trading Agent ID": "demo123",
  "BM Contract Type": "BELLA",
  "Elexon Unit Settlement Id": "No",
  "Control Telephony Installed": "Yes",
  "Control Telephony Number": "1234567890",
  "Control Telephony Country": "United Kingdom",
  "Control Telephony Country Code": "44",
```

```
"System Telephony Installed": "Yes",
"System Telephony Number": "1234567890",
"System Telephony Country": "United Kingdom",
"System Telephony Country Code": "44",
"Connected via OFTO": "Yes",
"OFTO Control Point Building Name": "CP Name",
"OFTO Control Point Street": "CP Street",
"OFTO Control Point City": "CP City",
"OFTO Control Point Post Code": "ABC123",
"OFTO Control Point County": "CP County",
"OFTO Control Point Country": "United Kingdom",
"OFTO Manager Name": "Smual Smith",
"OFTO Manager Email": "XYZ@mail.com",
"OFTO Manager Telephone": "1234567890",
"OFTO Manager Telephone Country": "United Kingdom",
"OFTO Manager Telephone Country Code": "44",
"OFTO Joint System Telephone Number": "1234567890",
"OFTO Joint System Telephone Country": "United Kingdom",
"OFTO Joint System Telephone Country Code": "44",
"eGAMA Party Name": "Samuel Smith",
"eGAMA Party Building Name": "Building Name",
"eGAMA Party Street": "Street",
"eGAMA Party City": "City",
"eGAMA Party Post Code": "XYZ123",
"eGAMA Party County": "Breshy",
"eGAMA Party Country": "United Kingdom",
"eGAMA Contact Name": "Joseph Kay",
"eGAMA Contact Telephone Number": "1234567890",
"eGAMA Contact Telephone Country": "United Kingdom",
"eGAMA Contact Telephone Country Code": "44",
"eGAMA Contact Email": "mail@mail.com",
"Is SAA Metering capacity being used?": "Yes",
"SAA Max Deliverable Demand Capacity": 20,
"SAA Max Deliverable Generation Capacity": 20,
"SAA Nameplate Capacity": 40
}
]
}
]
}
```



# API: Update Inventory

## Overview



| #    | Dataflow                         | Transfer Type | Payload                                                                                                                                                               |
|------|----------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.1  | Submit Select Unit/Asset Request | Request       |                                                                                                                                                                       |
| 6.22 | Response Payload                 | Response      | Asset Transaction JSON file providing:<br>JSON file with Unit/Asset details                                                                                           |
| 7.1  | Submit Unit Transaction          | Request       | JSON Unit Payload                                                                                                                                                     |
| 7.3  | Transaction Response             | Response      | One of: <ul style="list-style-type: none"> <li>Failed Data Validation</li> <li>Transaction ID</li> </ul>                                                              |
| 7.12 | Notification                     | Request       | Unit Transaction JSON file providing: <ul style="list-style-type: none"> <li>Successful records with SMP Unit ID</li> <li>Unsuccessful records with errors</li> </ul> |

## Specification

### Request

The request is a simple JSON payload made up of 2 sections:

| Key                                                                                                                      | Value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <pre>{   &lt;Notify Block&gt;,    "Unit":   {     &lt;Update Unit&gt;,     "Assets":     [       &lt;Asset ID&gt;,</pre> | <p>Information required for SMP API to notify of transaction completion – see “Model – Notify” for key-value pairs contained in <i>&lt;Notify Block&gt;</i></p> <p>Section containing information on the Unit (and if Unit is in Accepted Status, its associated Unit Services )to be updated in SMP.It will consist of one instance <i>&lt;Update Unit&gt;</i>. See “Model – Update Unit” for key-value pairs. The ‘Unit Key’ value must refer to the Unit that the user wishes to update. This value can be obtained using the ‘Select Unit’ API.</p> |

```

        <Asset ID>,
        ...
    ],
    "Unit Services":
    { <Update Unit
    Services>
    },
    "Assets":
    { <Update Assets>},
    "Asset Testing
    Services":
    { <Update Asset
    Testing Services>
    }
}

```

Complementary to this will be an Array of the Asset IDs which refer to the Assets to be included in the unit. All Asset IDs the user wants to be aligned to the unit must be included i.e. including assets that are currently aligned. These values can be obtained using the 'Select Asset' API. All Assets must have associated MPAN Pair records created – see Create MPAN Pairs section for more detail. If the Unit Category = Primary BMU, Secondary BMU or Additional Supplier BMU the user will need to include additional information relating to Balancing Mechanism registration. See the payload model and sample payload for details..

If the User wishes to update Asset(s) aligned to the Accepted Unit all details must be included for that Asset and associated Asset Testing Services. These values can be obtained using the 'Select Asset' API. If Unit is in "Accepted" status and the user wishes to update an Asset aligned to that unit, details for other Units associated to that Asset must be included in the payload.

If the user is sending a payload consisting of Units where the Status is equal to "Accepted", the user must include all mandatory fields in the payload. They will only be able to edit the array of Assets aligned to the unit, and the values for the tags detailed below:

| Record                | Tag                  | Data Type     | Example    | Allowed Values / Pattern | Other Validation Rule                                     |
|-----------------------|----------------------|---------------|------------|--------------------------|-----------------------------------------------------------|
| Asset                 | Generation Capacity  | Number(15,3)  | 50         | XXXXXXXXXXXXXXXXXX.XX    | Unit: MW<br>Mandatory if "Asset Type" = "Generation Unit" |
| Asset                 | Demand Capacity      | Number(15,3)  | 50         | XXXXXXXXXXXXXXXXXX.XX    | Unit: MW<br>Mandatory if "Asset Type" = "Demand Unit"     |
| Unit Service          | Allocated Volume     | Number (16,2) | 50         | XXXXXXXXXXXXXXXXXX.XX    |                                                           |
| Asset Testing Service | Date Approved by ITE | Date          | 23/06/2022 | DD/MM/YYYY               |                                                           |

|                       |                 |              |    |                       |
|-----------------------|-----------------|--------------|----|-----------------------|
| Asset Testing Service | Tested Capacity | Number(16,2) | 50 | XXXXXXXXXXXXXXXXXX.XX |
|-----------------------|-----------------|--------------|----|-----------------------|

If no change is detected in the payload compared to the pre-existing properties of the above fields, the transaction will be rejected with a status of 'Validation Failed'. If the changes made require manual approval by the NESO Registrations team and these are rejected, the transaction will also be rejected with a status of 'Validation Failed'.

## Response

A successful response is a JSON payload made up of 2 sections

```
{
  <Transaction Block>,
  "Unit":
  {
    <Unit>,
    "Assets":
    [
      <Asset ID>,
      <Asset ID>,
      ...
    ]
  }
}
```

Information to notify of transaction information – see “Model – Transaction” for key-value pairs contained in *<Transaction Block>*

Optional Section containing information on the Unit that was to be updated into SMP. It will consist of one instance *<Unit>*. See “Model – Unit” for key-value pairs.

Complementary to this will be an Array of the Asset IDs which refer to the Assets included in the unit.

## Notify

After an Update Inventory transaction has completed, the resulting notification will consist of a JSON payload made up of 1 section

Information to notify of transaction information – see “Model – Transaction” for key-value pairs contained in *<Transaction Block>*

## Payload Models

### Model – Notify

NDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                        | Data Type        | Example                         | Allowed Values / Pattern | Other Validation Rule                                                                                                      |
|-----|----------------------------|------------------|---------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------|
| M   | Notification Address       | Text(255)        | https://api.myco.com/SMPNotify/ |                          |                                                                                                                            |
| O   | Notification Username      | Text(255)        | MyUsername                      |                          |                                                                                                                            |
| O   | Notification Password      | Text(255)        | MyPassword                      |                          |                                                                                                                            |
| M   | Action Type                | Text (10)        | “Update”                        | “Update”                 |                                                                                                                            |
| M   | Basket Effective From Date | Date(YYYY-MM-DD) | “2030-07-01”                    | YYYY-MM-DD               | Date value given must be $\geq$ Today + 10. This will be the date updates to records in the payload will take effect from. |
| O   | hasMore                    | Boolean          | True                            | true, false              | If selected as “true”, User will be able to submit another payload as part of the same transaction                         |

The use of 'hasMore' is intended to give the user the option to submit multiple payloads for the same transaction, to be used if the number of records in one payload exceeds the limits for the amount that can be processed. Currently we advise including hasMore as 'True' if the number of assets in the payload for 1 Unit exceeds 50,000, or if there are more than 10 units, or if the number of assets across all units exceeds 50,000.

## Model – Update Unit

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                       | Data Type    | Example            | Allowed Values                               | Other Validation Rule                                                                                                                                                                                         |
|-----|---------------------------|--------------|--------------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| M   | Unit Key                  | Number(15,0) | 230000000000110    |                                              | Must be associated with a Unit owned by the User's account                                                                                                                                                    |
| M   | Unit Status               | Picklist     | Draft              | <b>Draft, Submitted, Accepted</b>            | If 'Submitted' is selected the Unit will be locked for editing prior to Approval by the NESO Registration team. Units where status = "Accepted" cannot be included in payloads with Units with other statuses |
| M   | Assets                    | Array        | 0000106116         | <b>Comma Separated Values</b>                | Must be associated with the User's account                                                                                                                                                                    |
| M   | Applicable Market         | Picklist     | Balancing Services | <b>See Appendix Picklist – Asset Markets</b> |                                                                                                                                                                                                               |
| M   | Unit Name                 | Text(80)     | Test_Unit111       | <b>Obtainable through Select Unit API</b>    |                                                                                                                                                                                                               |
| O   | Company Unique Identifier | Number       | 10007818           | <b>Obtainable through Select Unit API</b>    |                                                                                                                                                                                                               |
| O   | Unit ID                   | Text         | ABCD-123           | <b>Obtainable through Select Unit API</b>    |                                                                                                                                                                                                               |
| O   | Account Name              | Text         | Test Limited       | <b>Obtainable through Select Unit API</b>    |                                                                                                                                                                                                               |
| O   | Company ID                | Text(30)     | 08211691           | <b>Obtainable through Select Unit API</b>    |                                                                                                                                                                                                               |

|   |                     |                        |                    |                                                |                                                                                                                                           |
|---|---------------------|------------------------|--------------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| M | Unit Type           | Picklist(Multi-Select) | Demand Unit        | <b>See Appendix Picklist – Unit Types</b>      | If Applicable Market = “Demand Flexibility Service” then must be “Demand Unit”                                                            |
| M | Category            | Picklist               | Primary BMU        | <b>See Appendix Picklist – Categories</b>      | If Applicable Market = “Demand Flexibility Service” then must be “Non-BMU”                                                                |
| M | Effective From Date | Date                   | 2025-10-28         | YYYY-MM-DD                                     | Must be today or later                                                                                                                    |
| O | Effective To Date   | Date                   | 2025-10-28         | YYYY-MM-DD                                     | Must be today or later                                                                                                                    |
| M | Fuel Type           | Picklist               | Batteries          | <b>See Appendix Picklist – Fuel Types</b>      | If Applicable Market = “Demand Flexibility Service” then must be “Load Response”                                                          |
| O | Other Fuel Type     | Text(255)              | My Fuel Type       |                                                | Mandatory if Fuel Type = Other                                                                                                            |
| O | Generation Capacity | Number(15, 3)          | 297                | XXXXXXXXXXXXXXXX.YY                            | Unit:<br>Mandatory if “Unit Type” = “Generation Unit”.<br><br>Not applicable If Applicable Market = “Demand Flexibility Service”          |
| O | Demand Capacity     | Number(15, 3)          | 228                | XXXXXXXXXXXXXXXX.YY                            | Unit:<br>Mandatory if “Unit Type” = “Demand Unit”.<br><br>Must be between ‘1’ and ‘100’ if Applicable Market = Demand Flexibility Service |
| O | Customer Base       | Picklist               | Domestic           | <b>See Appendix Picklist – Customer Base</b>   | Only required if Applicable Market = “Demand Flexibility Service”                                                                         |
| O | Delivery Method     | Text (100)             | My Delivery Method |                                                | Only required if Applicable Market = “Demand Flexibility Service”                                                                         |
| M | Connection Type     | Picklist               | Flexible           | <b>See Appendix Picklist – Connection Type</b> | Not applicable If Applicable Market = “Demand Flexibility Service”                                                                        |

|   |                                |                         |                    |                                                           |                                                                                                                                                     |
|---|--------------------------------|-------------------------|--------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| M | Connected to DNO               | Picklist                | true               | See Appendix Picklist – Boolean                           | If Applicable Market = “Demand Flexibility Service” then must be true                                                                               |
| O | DNO                            | Picklist                | SP Energy Networks | See Appendix Picklist - DNO                               | Mandatory if “Connected to DNO” = true                                                                                                              |
| O | Supplier of Electricity        | Picklist                | Yes, No            | See Appendix Picklist – Are you a Supplier of Electricity | Only required if Applicable Market = “Demand Flexibility Service”                                                                                   |
| O | Connection Point Voltage       | Picklist                | 400                | See Appendix Picklist – Connection Point Voltage          | Unit: KV<br>Mandatory If Applicable Market = “Balancing Services”<br>Not applicable If Applicable Market = “Demand Flexibility Service”             |
| O | Other Connection Point Voltage | Number(16, 2)           | 100                | XXXXXXXXXXXXXXXXXX.YY                                     | Unit: KV<br>Mandatory if “Connection Point Voltage” = “Other”                                                                                       |
| O | Postcode                       | Text(8)                 | RG1 2HT            |                                                           | Mandatory If Applicable Market = “Balancing Services”<br>Not applicable If Applicable Market = “Demand Flexibility Service”                         |
| O | Latitude                       | Number(2,15)            | -3.584902          | +/- XXX.XXXXXXXXXXXXXXXXXX                                | Accepts -90 to +90<br>Mandatory If Applicable Market = “Balancing Services”<br>Not applicable If Applicable Market = “Demand Flexibility Service”   |
| O | Longitude                      | Number(3,15)            | 51.707079          | +/- XX.XXXXXXXXXXXXXXXXXX                                 | Accepts -180 to +180<br>Mandatory If Applicable Market = “Balancing Services”<br>Not applicable If Applicable Market = “Demand Flexibility Service” |
| O | Nearest Node                   | Text(6)                 | abha               |                                                           | Mandatory If Applicable Market = “Balancing Services”<br>Not applicable If Applicable Market = “Demand Flexibility Service”                         |
| O | GSP                            | Picklist (Multi-Select) | ABHA_1             | See Appendix Picklist - GSP                               | Mandatory If Applicable Market = “Balancing Services”                                                                                               |



|   |                                  |          |                                                      |                                                    |                                                                                                                             |
|---|----------------------------------|----------|------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|   |                                  |          |                                                      |                                                    | Not applicable If Applicable Market = "Demand Flexibility Service"                                                          |
| O | Other GSP                        | Text(10) | New GSP                                              |                                                    | Mandatory if "GSP" = "Others"                                                                                               |
| O | GSP Group                        | Picklist | Eastern England                                      | <b>See Appendix Picklist – GSP Group</b>           | Mandatory If Applicable Market = "Balancing Services"<br>Not applicable If Applicable Market = "Demand Flexibility Service" |
| O | Primary Despatch Email Address   | Email    | <a href="mailto:hello@email.com">hello@email.com</a> |                                                    | Mandatory if "Applicable Market" = "Demand Flexibility Service"                                                             |
| M | Primary Despatch Phone Country   | Picklist | United Kingdom                                       | <b>See Appendix - Picklist Country (Telephone)</b> |                                                                                                                             |
| M | Primary Despatch Phone Number    | Text(10) | 7554456564                                           |                                                    |                                                                                                                             |
| O | Secondary Despatch Email Address | Email    | <a href="mailto:hello@email.com">hello@email.com</a> |                                                    | Mandatory if "Applicable Market" = "Demand Flexibility Service"                                                             |
| M | Secondary Despatch Phone Country | Picklist | United Kingdom                                       | <b>See Appendix - Picklist Country (Telephone)</b> |                                                                                                                             |
| M | Secondary Despatch Phone Number  | Text(10) | 7676567657                                           |                                                    |                                                                                                                             |
| O | Despatch Fax Number Country      | Picklist | United Kingdom                                       | <b>See Appendix - Picklist Country (Telephone)</b> |                                                                                                                             |
| O | Despatch Fax Number              | Text(10) | 7554456564                                           |                                                    |                                                                                                                             |
| O | Application Contact Name         | Text(80) | John Hill                                            |                                                    | Mandatory if Category = Primary BMU, Secondary BMU, Additional Supplier BMU. Not allowed if Category = Non-BMU              |
| O | Application Contact Email        | Email    | <a href="mailto:hello@email.com">hello@email.com</a> |                                                    | Mandatory if Category = Primary BMU, Secondary BMU, Additional Supplier BMU. Not allowed if Category = Non-BMU              |
| O | Application Contact Number       | Phone    | 7554456564                                           |                                                    | Mandatory if Category = Primary BMU, Secondary BMU, Additional                                                              |

|   |                                        |                    |                |                                                                                                                |
|---|----------------------------------------|--------------------|----------------|----------------------------------------------------------------------------------------------------------------|
|   |                                        |                    |                | Supplier BMU. Not allowed if Category = Non-BMU                                                                |
| O | Application Contact Country            | Text(40)           | United Kingdom | Mandatory if Category = Primary BMU, Secondary BMU, Additional Supplier BMU. Not allowed if Category = Non-BMU |
| O | Application Contact Country Code       | Text(10)           | 44             | Mandatory if Category = Primary BMU, Secondary BMU, Additional Supplier BMU. Not allowed if Category = Non-BMU |
| O | Manned Location Telephone Number       | Phone              | 7554456564     |                                                                                                                |
| O | Manned Location Telephone Country      | Text(40)           | United Kingdom |                                                                                                                |
| O | Manned Location Telephone Country Code | Text(10)           | 44             |                                                                                                                |
| O | DNO Connection Point                   | Text(255)          | ABC            |                                                                                                                |
| O | FPN Flag                               | Picklist (Yes; No) | Yes            | Mandatory if Category = Primary BMU, Secondary BMU, Additional Supplier BMU. Not allowed if Category = Non-BMU |
| O | EIC Resource Code (Type W)             | Text(16)           | ABC            | Not allowed if Category = Non-BMU                                                                              |

### Model – Update Unit BM Registration Information

| M/O | Tag              | Data Type | Example   | Allowed Values | Other Validation Rule                                  |
|-----|------------------|-----------|-----------|----------------|--------------------------------------------------------|
| O   | Control Point ID | Text      | CP-000007 |                | Control Point Must be in Submitted or Accepted Status. |

|   |                             |           |           |                      |                                                                                                                                    |
|---|-----------------------------|-----------|-----------|----------------------|------------------------------------------------------------------------------------------------------------------------------------|
|   |                             |           |           |                      | NESO BM<br>Registration Team<br>can supply Control<br>Point IDs                                                                    |
| O | Trading Agent ID            | Text      | TA-000009 |                      | Trading Agent<br>Must be in<br>Submitted or<br>Accepted Status.<br>NESO BM<br>Registration Team<br>can supply Trading<br>Agent IDs |
| O | Elexon Unit Settlement Id   | Text (11) | No        |                      |                                                                                                                                    |
| O | BM Contract Type            | Picklist  | BEGA      | BELLA; BEGA; BCA; NA |                                                                                                                                    |
| O | Control Telephony Installed | Picklist  | Yes       | Yes; No              |                                                                                                                                    |

|   |                                  |            |                |         |                                                        |
|---|----------------------------------|------------|----------------|---------|--------------------------------------------------------|
| O | Control Telephony Number         | Text (40)  | 1234567890     |         | Mandatory only if 'Control Telephony Installed' ='Yes' |
| O | Control Telephony Country        | Text (40)  | United Kingdom |         | Mandatory only if 'Control Telephony Installed' ='Yes' |
| O | Control Telephony Country Code   | Text (10)  | 44             |         | Mandatory only if 'Control Telephony Installed' ='Yes' |
| O | System Telephony Installed       | Picklist   | Yes            | Yes; No |                                                        |
| O | System Telephony Number          | Text (40)  | 1234567890     |         | Mandatory only if 'System Telephony Installed' ='Yes'  |
| O | System Telephony Country         | Text (40)  | United Kingdom |         | Mandatory only if 'System Telephony Installed' ='Yes'  |
| O | System Telephony Country Code    | Text (10)  | 44             |         | Mandatory only if 'System Telephony Installed' ='Yes'  |
| O | Connected via OFTO               | Picklist   | Yes            | Yes; No |                                                        |
| O | OFTO Control Point Building Name | Text (100) | CP Name        |         | Only If 'Connected via OFTO' =Yes                      |
| O | OFTO Control Point Street        | Text (100) | CP Street      |         | Only If 'Connected via OFTO' =Yes                      |
| O | OFTO Control Point City          | Text (50)  | CP City        |         | Only If 'Connected via OFTO' =Yes                      |
| O | OFTO Control Point Post Code     | Text (10)  | ABC123         |         | Only If 'Connected via OFTO' =Yes                      |

|   |                                          |            |                |                                   |
|---|------------------------------------------|------------|----------------|-----------------------------------|
| O | OFTO Control Point Country               | Text (50)  | CP Country     | Only If 'Connected via OFTO' =Yes |
| O | OFTO Control Point Country               | Text (50)  | United Kingdom | Only If 'Connected via OFTO' =Yes |
| O | OFTO Manager Name                        | Text (150) | Samual Smith   | Only If 'Connected via OFTO' =Yes |
| O | OFTO Manager Email                       | Email (80) | XYZ@mail.com   | Only If 'Connected via OFTO' =Yes |
| O | OFTO Manager Telephone                   | Text (40)  | 1234567890     | Only If 'Connected via OFTO' =Yes |
| O | OFTO Manager Telephone Country           | Text (40)  | United Kingdom | Only If 'Connected via OFTO' =Yes |
| O | OFTO Manager Telephone Country Code      | Text (10)  | 44             | Only If 'Connected via OFTO' =Yes |
| O | OFTO Joint System Telephone Number       | Text (40)  | 1234567890     | Only If 'Connected via OFTO' =Yes |
| O | OFTO Joint System Telephone Country      | Text (40)  | United Kingdom | Only If 'Connected via OFTO' =Yes |
| O | OFTO Joint System Telephone Country Code | Text (10)  | 44             | Only If 'Connected via OFTO' =Yes |
| O | eGAMA Party Name                         | Text (150) | Samuel Smith   |                                   |
| O | eGAMA Party Building Name                | Text (100) | Building Name  |                                   |
| O | eGAMA Party Street                       | Text (100) | Street         |                                   |
| O | eGAMA Party City                         | Text (50)  | City           |                                   |

|   |                                         |                |                |           |                                                                    |
|---|-----------------------------------------|----------------|----------------|-----------|--------------------------------------------------------------------|
| O | eGAMA Party Post Code                   | Text (10)      | XYZ123         |           |                                                                    |
| O | eGAMA Party County                      | Text (50)      | Breshy         |           |                                                                    |
| O | eGAMA Party Country                     | Text (50)      | United Kingdom |           |                                                                    |
| O | eGAMA Contact Name                      | Text (150)     | Joseph Kay     |           |                                                                    |
| O | eGAMA Contact Telephone Number          | Text (40)      | 1234567890     |           |                                                                    |
| O | eGAMA Contact Telephone Country         | Text (40)      | United Kingdom |           |                                                                    |
| O | eGAMA Contact Telephone Country Code    | Text (10)      | 44             |           |                                                                    |
| O | eGAMA Contact Email                     | Email (80)     | mail@mail.com  |           |                                                                    |
| O | Is SAA Metering capacity being used?    | Picklist       | Yes            | (Yes; No) | Only if Unit category is Secondary BMU and Additional Supplier BMU |
| O | SAA Max Deliverable Demand Capacity     | Number (15, 3) | 20             |           | Only if 'Is SAA Metering capacity being used'=Yes                  |
| O | SAA Max Deliverable Generation Capacity | Number (15, 3) | 20             |           | Only if 'Is SAA Metering capacity being used'=Yes                  |
| O | SAA Nameplate Capacity                  | Number (15, 3) | 40             |           | Only if 'Is SAA Metering capacity being used'=Yes                  |

---

---

### Model – Unit Service

| M/O | Tag                             | Data Type      | Example              | Allowed Values / Pattern | Other Validation Rule                                                        |
|-----|---------------------------------|----------------|----------------------|--------------------------|------------------------------------------------------------------------------|
| O   | Active Network Management       | Picklist       | Yes                  | Yes; No                  |                                                                              |
| M   | Allocated Volume                | Number (16, 2) | 12                   | XXXXXXXXXXXXXXXXXX.XX    | Must be ≥ the value of the Service Minimum Threshold of the relevant Service |
| O   | Cease Time                      | Number (2, 0)  | 20                   | xx                       |                                                                              |
| O   | Time to Full Delivery (in mins) | Number (17, 1) | 15                   | XXXXXXXXXXXXXXXXXX.X     |                                                                              |
| O   | Maximum Utilisation Period      | Number (2, 0)  | 5                    | XX                       |                                                                              |
| O   | Minimum Non Zero Time           | Number (3, 0)  | 5                    | XXX                      |                                                                              |
| O   | Operational Metering Available  | Picklist       | Yes                  | Yes; No                  |                                                                              |
| O   | Ramp Down Rate                  | Number (16, 2) | 20                   | XXXXXXXXXXXXXXXXXX.XX    |                                                                              |
| O   | Ramp Up Rate                    | Number (16, 2) | 20                   | XXXXXXXXXXXXXXXXXX.XX    |                                                                              |
| O   | Recovery Period                 | Number (3, 0)  | 12                   | XXX                      |                                                                              |
| O   | Response Time                   | Number (2, 0)  | 12                   | XX                       |                                                                              |
| O   | Service End Date                | Datetime       | 2032-02-01T00:00:00Z | YYYY-MM-DDTHH:MM:SSZ     |                                                                              |
| O   | Service Start Date              | Datetime       | 2032-02-01T00:00:00Z | YYYY-MM-DDTHH:MM:SSZ     |                                                                              |

|   |                             |           |                        |                                                                                                               |
|---|-----------------------------|-----------|------------------------|---------------------------------------------------------------------------------------------------------------|
| O | Service Status              | Picklist  | Approved               | (Draft; Approved; Rejected; Withdrawn; Suspended; Incomplete; Submitted; Signature in progress; Acknowledged) |
| O | Unit of Measurement         | Picklist  | MW                     | (MW; MVAR)                                                                                                    |
| O | Telephony Available from    | Picklist  | 00:30;                 | See Appendix – Telephony Available From/To                                                                    |
| O | Telephony Available to      | Picklist  | 03:30;                 | See Appendix – Telephony Available From/To                                                                    |
| O | Service Provision           | Picklist  | Generator              | (Generator; Supplier; Through Zero)                                                                           |
| O | Service Name                | Picklist  | Dynamic Containment HF | Values available from the Select Service Catalog API response - 'Ancillary Service Name' payload tag          |
| O | Service Code                | Text (3)  | DCH                    | Values available from the Select Service Catalog API response - 'Service Code' payload tag                    |
| O | First Authorised Signatory  | Text (20) | Smith Jones            |                                                                                                               |
| O | Second Authorised Signatory | Text (20) | Smith Jones            |                                                                                                               |
| O | Third Authorised Signatory  | Text (20) | Smith Jones            |                                                                                                               |

## Model – Unit

This Model includes all fields in Model – Update Unit plus the following:

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload.

| M/O | Tag           | Data Type | Example    | Allowed Values / Pattern | Other Validation Rule |
|-----|---------------|-----------|------------|--------------------------|-----------------------|
| O   | Account Name  | Text(255) | My Company |                          |                       |
| O   | Error Message | Long Text |            | O                        | Error Message         |



## Model – Transaction

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                | Data Type | Example           | Allowed Values                | Other Validation Rule                          |
|-----|--------------------|-----------|-------------------|-------------------------------|------------------------------------------------|
| O   | Transaction ID     | Text(10)  | 0000000418        |                               | Will be null if payload fails basic validation |
| M   | Transaction Status | Text(10)  | Process Completed | See Transaction State Diagram |                                                |
| M   | Transaction Type   | Text(10)  | Unit              | “Unit”                        |                                                |
| M   | Action Type        | Text(10)  | Update            | “Unit”                        |                                                |

## Payload Samples

### Request

#### Example 1: Non-Balancing Mechanism Unit in Draft Status

```
{
  "Notification Address":"https://api.mycompany.com/SMPNotification",
  "Notification Username":"MyUsername",
  "Notification Password":"MyPassword",
  "Basket Effective From Date": "2029-12-29",
  "Action Type":"Update",
  "Units":
  {
    "Assets": [
      {
        "Unit Key": "0000106116",
        "Unit Key": 230000000000110,
        "Unit Status": "Draft",
        "Unit Type": "Generation Unit;Demand Unit",
        "Effective From Date": "2024-06-19",
        "Fuel Type": "Batteries",
        "Other Fuel Type": "ABC",
        "Generation Capacity": 297,
        "Demand Capacity": 200,
        "Customer Base": "Domestic",
        "Delivery Method": "Manually instructed",
        "Connection Type": "Flexible",
        "Connected to DNO": true,
        "DNO": "Electricity North West",
        "Connection Point Voltage": "Other",
        "Other Connection Point Voltage": 40.2,
        "Postcode": "RG1 7QE",
        "Longitude": "-3.584902",
        "Latitude": "51.707079",
        "Nearest Node": "abha",
        "GSP": "ABHA_1",
        "Other GSP": "",
        "GSP Group": "Eastern England",
        "Primary Despatch Email Address": "Contact1@xyztestenergy.co.uk",
        "Primary Despatch Phone Country": "United Kingdom",
        "Primary Despatch Phone Number": "7554456564",
        "Secondary Despatch Email Address": "Contact2@xyztestenergy.co.uk",
        "Secondary Despatch Phone Country": "United Kingdom",
        "Secondary Despatch Phone Number": "7676567657",
        "Despatch Fax Number Country": "United Kingdom",
        "Despatch Fax Number": "4645654643",
        "Category": "Non- BMU",
      }
    ]
  }
}
```

#### Example 2: Balancing Mechanism Unit in Draft Status

```
{
  "Notification Address":"https://api.mycompany.com/SMPNotification",
  "Notification Username":"MyUsername",
  "Notification Password":"MyPassword",
  "Basket Effective From Date": "2029-12-29",
  "Action Type":"Update",
}
```

```

"Units": [
  {
    "Assets": [
      "0000220200"
    ],
    "Account Name": "ABC LTD",
    "Company ID": "10446550",
    "Company Unique Identifier": 10009615,
    "Unit Name": "Test BM Unit",
    "Unit ID": null,
    "Applicable Market": "Balancing Services",
    "Unit Type": "Generation Unit;Demand Unit",
    "Unit Status": "Draft",
    "Effective From Date": "2029-06-19",
    "Effective To Date": null,
    "Fuel Type": "Other",
    "Other Fuel Type": "Other",
    "Generation Capacity": 0.01,
    "Demand Capacity": 0.09,
    "Customer Base": "Domestic",
    "Delivery Method": null,
    "Connection Type": "Flexible",
    "Connected to DNO": true,
    "DNO": "ESB Networks",
    "Connection Point Voltage": "400",
    "Other Connection Point Voltage": 50,
    "Postcode": "RG1 7QE",
    "Longitude": "-3.584902",
    "Latitude": "51.707079",
    "Nearest Node": "abha",
    "GSP": "ABHA_1;Others",
    "Other GSP": "ABD_1",
    "GSP Group": "Eastern England",
    "Primary Despatch Email Address":
"contact@xyztestenergy.co.uk",
    "Secondary Despatch Email Address":
"contact2@xyztestenergy.co.uk",
    "Primary Despatch Phone Country": "United Kingdom",
    "Primary Despatch Phone Number": "7554456564",
    "Secondary Despatch Phone Country": "United Kingdom",
    "Secondary Despatch Phone Number": "7676567657",
    "Despatch Fax Number Country": "United Kingdom",
    "Despatch Fax Number": "4645654643",
    "Category": "Primary BMU",
    "FPN Flag": "Yes",
    "Supplier of Electricity": "No",
    "Unit Key": 230000000010279,
    "Application Contact Name": "John Smith",
    "Application Contact Email": "john.smith@nationalgrid.com",
    "Application Contact Number": "1212121212",
    "Application Contact Country": "United Kingdom",
    "Application Contact Country Code": "44",
    "Manned Location Telephone Number": "1234567890",
    "Manned Location Telephone Country": "United Kingdom",
    "Manned Location Telephone Country Code": "44",
    "DNO Connection Point": "ABC",
    "EIC Resource Code (Type W)": "ABC",
    "BM Registration": {
      "Unit Key": 230000000000096,
      "Control Point ID": "CP-000002",
      "Trading Agent ID": "TA-000001",
      "Elxon Unit Settlement Id": "No",
      "Control Telephony Installed": null,
      "Control Telephony Number": null,
      "Control Telephony Country": null,
      "Control Telephony Country Code": null,
    }
  }
]

```

```

        "System Telephony Installed": null,
        "System Telephony Number": null,
        "System Telephony Country": null,
        "System Telephony Country Code": null,
        "BM Contract Type": "BELLA",
        "Connected via OFTO": null,
        "OFTO Control Point Building Name": "CP Name",
        "OFTO Control Point Street": "CP Street",
        "OFTO Control Point City": "CP City",
        "OFTO Control Point Post Code": "ABC123",
        "OFTO Control Point County": "CP County",
        "OFTO Control Point Country": "United Kingdom",
        "OFTO Manager Name": "Smual Smith",
        "OFTO Manager Email": "xyz@mail.com",
        "OFTO Manager Telephone": "1234567890",
        "OFTO Manager Telephone Country": "United Kingdom",
        "OFTO Manager Telephone Country Code": "44",
        "OFTO Joint System Telephone Number": "1234567890",
        "OFTO Joint System Telephone Country": "United Kingdom",
        "OFTO Joint System Telephone Country Code": "44",
        "eGAMA Party Name": "Samuel Smith",
        "eGAMA Party Building Name": "Building Name",
        "eGAMA Party Street": "Street",
        "eGAMA Party City": "City",
        "eGAMA Party Post Code": "XYZ123",
        "eGAMA Party County": "Breshy",
        "eGAMA Party Country": "United Kingdom",
        "eGAMA Contact Name": "Joseph Kay",
        "eGAMA Contact Telephone Number": "1234567890",
        "eGAMA Contact Telephone Country": "United Kingdom",
        "eGAMA Contact Telephone Country Code": "44",
        "eGAMA Contact Email": "mail@mail.com",
        "Is SAA Metering capacity being used?": null,
        "SAA Max Deliverable Demand Capacity": null,
        "SAA Max Deliverable Generation Capacity": null,
        "SAA Nameplate Capacity": null
    }
}
]
}

```

### Example 3: Unit in Accepted Status

```

{
  "Notification Address": "HTTPS://www.callback.xyztestenergy.co.uk",
  "Notification Username": "XYZ Test Energy",
  "Notification Password": "*****",
  "Basket Effective From Date": "2024-04-01",
  "Action Type": "Update",
  "Units": [{
    "Unit Name": "My unit 1",
    "Account Name": "ABC LTD",
    "Company ID": "13390812",
    "Company Unique Identifier": "10007733",

```

```

    "Unit ID": "22222",
    "Applicable Market": "Balancing Services",
    "Unit Type": "Demand Unit",
    "Unit Status": "Accepted",
    "Effective From Date": "2024-03-29",
    "Effective To Date": null,
    "Fuel Type": "Biomass",
    "Other Fuel Type": null,
    "Generation Capacity": 0,
    "Demand Capacity": 123456719012345.33,
    "Customer Base": null,
    "Delivery Method": null,
    "Connection Type": "Firm",
    "Connected to DNO": false,
    "DNO": null,
    "Connection Point Voltage": "275",
    "Other Connection Point Voltage": null,
    "Postcode": "11111111",
    "Longitude": "-3.584902",
    "Latitude": "51.707079",
    "Nearest Node": "ABC",
    "GSP": "ABHA_1",
    "Other GSP": null,
    "GSP Group": "Eastern England",
    "Primary Despatch Email Address": null,
    "Secondary Despatch Email Address": null,
    "Primary Despatch Phone Number": "1111111111",
    "Primary Despatch Phone Country": "United Kingdom",
    "Secondary Despatch Phone Number": "1111111111",
    "Secondary Despatch Phone Country": "United Kingdom",
    "Despatch Fax Number Country": null,
    "Despatch Fax Number": "United Kingdom",
    "Category": "Primary BMU",
    "Supplier of Electricity": null,
    "Unit Key": "200000000000333",
    "Assets": [
        "0000106753"
    ],
    "Unit Services": [
        {
            "Active Network Management": "Yes",
            "Allocated Volume": 122,
            "Cease Time": 11,
            "Cease Time": 11,
            "Cease Time (s)": 1,
            "Time to Full Delivery (in mins)": 1,
            "Time to Full Delivery (s)": 10,
            "Maximum Utilisation Period": 11,
            "Minimum Non Zero Time": 11,
            "Operational Metering Available": "Yes",
            "Ramp Down Rate": null,
            "Ramp Up Rate": 0,
            "Recovery Period": 11,
            "Response Time": 1,
            "Response Time (s)": 10,
            "Minimum Activation Period": 1,
            "Service End Date": "2032-12-21 01:00:00",
            "Service Start Date": "2022-12-21 07:00:00",
            "Service Status": "Approved",
            "Unit of Measurement": "MW",
            "Telephony Available from": "00:30",
            "Telephony Available to": "00:30",
            "Service Provision": "Generator",
            "Service Name": "Negative Balancing Reserve",
            "Service Code": "NBR",
            "First Authorised Signatory": "Smith Jones",
            "Second Authorised Signatory": null,
        }
    ]
}

```

```

        "Third Authorised Signatory": null
    }
}
],
{
    "Unit Name": "Secondary Unit 12",
    "Account Name": " ABC LTD ",
    "Company ID": "11012159",
    "Company Unique Identifier": "10007725",
    "Unit ID": "AG-02C",
    "Applicable Market": "Balancing Services",
    "Unit Type": "Generation Unit;Demand Unit",
    "Unit Status": "Accepted",
    "Effective From Date": "2024-03-30",
    "Effective To Date": null,
    "Fuel Type": "Biomass",
    "Other Fuel Type": null,
    "Generation Capacity": 80,
    "Demand Capacity": 80,
    "Customer Base": null,
    "Delivery Method": null,
    "Connection Type": "Firm",
    "Connected to DNO": false,
    "DNO": null,
    "Connection Point Voltage": null,
    "Other Connection Point Voltage": null,
    "Postcode": null,
    "Longitude": "-3.5904902",
    "Latitude": "4.5904902",
    "Nearest Node": null,
    "GSP": "ABHA_1",
    "Other GSP": null,
    "GSP Group": "London",
    "Primary Despatch Email Address": null,
    "Secondary Despatch Email Address": null,
    "Primary Despatch Phone Country": "United Kingdom",
    "Primary Despatch Phone Number": "9876543210",
    "Secondary Despatch Phone Country": "United Kingdom",
    "Secondary Despatch Phone Number": "9876543210",
    "Despatch Fax Number Country": null,
    "Despatch Fax Number": null,
    "Category": "Secondary BMU",
    "Supplier of Electricity": null,
    "Unit Key": "200000000000444",
    "Assets": [
        "0000106758"
    ],
    "Unit Services": [
        {
            "Active Network Management": "Yes",
            "Allocated Volume": 122,
            "Cease Time": 11,
            "Cease Time": 11,
            "Cease Time (s)": 1,
            "Time to Full Delivery (in mins)": 1,
            "Time to Full Delivery (s)": 10,
            "Maximum Utilisation Period": 11,
            "Minimum Non Zero Time": 11,
            "Operational Metering Available": "Yes",
            "Ramp Down Rate": null,
            "Ramp Up Rate": 0,
            "Recovery Period": 11,
            "Response Time": 1,
            "Response Time (s)": 10,
            "Minimum Activation Period": 1,
            "Service End Date": "2032-12-21 01:00:00",
            "Service Start Date": "2022-12-21 07:00:00",

```

```

        "Service Status": "Approved",
        "Unit of Measurement": "MW",
        "Telephony Available from": "00:30",
        "Telephony Available to": "00:30",
        "Service Provision": "Generator",
        "Service Name": "Negative Balancing Reserve",
        "Service Code": "NBR",
        "First Authorised Signatory": "Smith Jones",
        "Second Authorised Signatory": null,
        "Third Authorised Signatory": null
    }
}
],
{
    "Unit Name": "New unit 4567",
    "Account Name": " ABC LTD ",
    "Company ID": "11012159",
    "Company Unique Identifier": "10007725",
    "Unit ID": "AG-01B",
    "Applicable Market": "Balancing Services",
    "Unit Type": "Generation Unit;Demand Unit",
    "Unit Status": "Accepted",
    "Effective From Date": "2024-03-30",
    "Effective To Date": null,
    "Fuel Type": "Multi Fuel type",
    "Other Fuel Type": null,
    "Generation Capacity": 150,
    "Demand Capacity": 150,
    "Customer Base": null,
    "Delivery Method": null,
    "Connection Type": "Firm",
    "Connected to DNO": false,
    "DNO": null,
    "Connection Point Voltage": null,
    "Other Connection Point Voltage": null,
    "Postcode": null,
    "Longitude": null,
    "Latitude": null,
    "Nearest Node": null,
    "GSP": "ABHA_1",
    "Other GSP": null,
    "GSP Group": "East Midlands",
    "Primary Despatch Email Address": null,
    "Secondary Despatch Email Address": null,
    "Primary Despatch Phone Country": "Algeria",
    "Primary Despatch Phone Number": "9876543210",
    "Secondary Despatch Phone Country": "Afghanistan",
    "Secondary Despatch Phone Number": "9876543210",
    "Despatch Fax Number Country": null,
    "Despatch Fax Number": null,
    "Category": "Secondary BMU",
    "Supplier of Electricity": null,
    "Unit Key": "200000000000555",
    "Assets": [
        "0000106758",
        "0000106759"
    ],
    "Unit Services": [
        {
            "Active Network Management": "Yes",
            "Allocated Volume": 122,
            "Cease Time": 11,
            "Cease Time": 11,
            "Cease Time (s)": 1,
            "Time to Full Delivery (in mins)":1,
            "Time to Full Delivery (s)":10,
            "Maximum Utilisation Period": 11,

```

```

        "Minimum Non Zero Time": 11,
        "Operational Metering Available": "Yes",
        "Ramp Down Rate": null,
        "Ramp Up Rate": 0,
        "Recovery Period": 11,
        "Response Time": 1,
        "Response Time (s)": 10,
        "Minimum Activation Period": 1,
        "Service End Date": "2032-12-21 01:00:00",
        "Service Start Date": "2022-12-21 07:00:00",
        "Service Status": "Approved",
        "Unit of Measurement": "MW",
        "Telephony Available from": "00:30",
        "Telephony Available to": "00:30",
        "Service Provision": "Generator",
        "Service Name": "Negative Balancing Reserve",
        "Service Code": "NBR",
        "First Authorised Signatory": "Smith Jones",
        "Second Authorised Signatory": null,
        "Third Authorised Signatory": null
    },
    {
        "Active Network Management": "Yes",
        "Allocated Volume": 122,
        "Cease Time": 11,
        "Cease Time": 11,
        "Cease Time (s)": 1,
        "Time to Full Delivery (in mins)": 1,
        "Time to Full Delivery (s)": 10,
        "Maximum Utilisation Period": 11,
        "Minimum Non Zero Time": 11,
        "Operational Metering Available": "Yes",
        "Ramp Down Rate": null,
        "Ramp Up Rate": 0,
        "Recovery Period": 11,
        "Response Time": 1,
        "Response Time (s)": 10,
        "Minimum Activation Period": 1,
        "Service End Date": "2032-12-21 01:00:00",
        "Service Start Date": "2022-12-21 07:00:00",
        "Service Status": "Approved",
        "Unit of Measurement": "MW",
        "Telephony Available from": "00:30",
        "Telephony Available to": "00:30",
        "Service Provision": "Generator",
        "Service Name": "Negative Balancing Reserve",
        "Service Code": "NBR",
        "First Authorised Signatory": "Smith Jones",
        "Second Authorised Signatory": null,
        "Third Authorised Signatory": null
    }
]
},
"Assets":
[
    {
        "Asset Id": "0000106721",
        "Asset Name": "BS Test Asset 3",
        "Asset Owner Name": "ABC LTD",
        "Asset Owner Account Unique Identifier": "10007725",
        "Asset Owner Company ID": "11012159",
        "Asset Agent Name": null,
        "Asset Agent Company ID": null,
        "Asset Agent Account Unique Identifier ": "10048332",
        "Asset Type": "Generation Unit",
        "Asset Status": "Versioned",

```



```

    "Applicable Market": "Balancing Services",
    "Effective From Date": "2024-03-05",
    "Effective To Date": "2024-04-03",
    "Fuel Type": "Biomass",
    "Other Fuel Type": null,
    "Generation Capacity": 60,
    "Demand Capacity": null,
    "Connection Type": "Firm",
    "Connected to DNO": false,
    "DNO": null,
    "DNO Unique Reference Number": null,
    "Connection Point Voltage": null,
    "Other Connection Point Voltage kV": null,
    "Connection Method": null,
    "Postcode": "12345",
    "Longitude": 73.01,
    "Latitude": 72.01,
    "Nearest Node": "sdf",
    "GSP": "ABHA_1",
    "Other GSP": null,
    "GSP Group ID": "East Midlands",
    "Primary Despatch Phone Country": "United Kingdom",
    "Primary Despatch Phone Number": "3333333333",
    "Secondary Despatch Phone Country": "United Kingdom",
    "Secondary Despatch Phone Number": "4444444444",
    "Fax Despatch Phone Country": null,
    "Fax Despatch Phone Number": null,
    "Operational Metering Availability": "Yes",
    "Asset Size": null,
    "Site Contact Name": null,
    "Site Contact Number": null,
    "Site Street Address": "St",
    "Site City": "qw",
    "Site State or County": "qwe",
    "Site Country": "qw",
    "Agent or Applicant Operational Email": null,
    "Agent or Applicant Operational Phone": null,
    "Asset Testing Service": null
  },
  {
    "Asset Id": "0000106721",
    "Asset Name": "BS Test Asset 3",
    "Asset Owner Name": " ABC LTD ",
    "Asset Owner Account Unique Identifier": "10007725",
    "Asset Owner Company ID": "11012159",
    "Asset Agent Name": "OPEN LIMITED",
    "Asset Agent Company ID": "04037885",
    "Asset Agent Account Unique Identifier": "10048311",
    "Asset Type": "Generation Unit",
    "Asset Status": "Accepted",
    "Applicable Market": "Balancing Services",
    "Effective From Date": "2024-04-04",
    "Effective To Date": "2024-04-05",
    "Fuel Type": "Biomass",
    "Other Fuel Type": null,
    "Generation Capacity": 60,
    "Demand Capacity": null,
    "Connection Type": "Firm",
    "Connected to DNO": false,
    "DNO": null,
    "DNO Unique Reference Number": null,
    "Connection Point Voltage": null,
    "Other Connection Point Voltage kV": null,
    "Connection Method": null,
    "Postcode": "12345",
    "Longitude": 73.01,
    "Latitude": 72.01,

```

```

    "Nearest Node": "sdf",
    "GSP": "ABHA_1",
    "Other GSP": null,
    "GSP Group ID": "East Midlands",
    "Primary Despatch Phone Country": "United Kingdom",
    "Primary Despatch Phone Number": "3333333333",
    "Secondary Despatch Phone Country": "United Kingdom",
    "Secondary Despatch Phone Number": "4444444444",
    "Fax Despatch Phone Country": null,
    "Fax Despatch Phone Number": null,
    "Operational Metering Availability": "Yes",
    "Asset Size": null,
    "Site Contact Name": null,
    "Site Contact Number": null,
    "Site Street Address": "St",
    "Site City": "qw",
    "Site State or County": "qwe",
    "Site Country": "qw",
    "Agent or Applicant Operational Email": null,
    "Agent or Applicant Operational Phone": null,
    "Asset Testing Service": null
  },
  {
    "Asset Id": "0000106759",
    "Asset Name": "Asset 2 29 Mar",
    "Asset Owner Name": " ABC LTD ",
    "Asset Owner Account Unique Identifier": "10007725",
    "Asset Owner Company ID": "11012159",
    "Asset Agent Name": null,
    "Asset Agent Company ID": null,
    "Asset Agent Account Unique Identifier": "10048234",
    "Asset Type": "Generation Unit;Demand Unit",
    "Asset Status": "Accepted",
    "Applicable Market": "Balancing Services",
    "Effective From Date": "2024-03-29",
    "Effective To Date": null,
    "Fuel Type": "CCGT",
    "Other Fuel Type": null,
    "Generation Capacity": 70,
    "Demand Capacity": 70,
    "Connection Type": "Firm",
    "Connected to DNO": false,
    "DNO": null,
    "DNO Unique Reference Number": null,
    "Connection Point Voltage": null,
    "Other Connection Point Voltage kV": null,
    "Connection Method": null,
    "Postcode": "70",
    "Longitude": 70,
    "Latitude": 70,
    "Nearest Node": "70",
    "GSP": "ABTH_1",
    "Other GSP": null,
    "GSP Group ID": "East Midlands",
    "Primary Despatch Phone Country": "United Kingdom",
    "Primary Despatch Phone Number": "9876543210",
    "Secondary Despatch Phone Country": "United Kingdom",
    "Secondary Despatch Phone Number": "9876543210",
    "Fax Despatch Phone Country": null,
    "Fax Despatch Phone Number": null,
    "Operational Metering Availability": "Yes",
    "Asset Size": null,
    "Site Contact Name": null,
    "Site Contact Number": null,
    "Site Street Address": "70",
    "Site City": "70",
    "Site State or County": "70",

```

```

        "Site Country": "70",
        "Agent or Applicant Operational Email": null,
        "Agent or Applicant Operational Phone": null,
        "Asset Testing Service": [
            {
                "Date Approved by ITE": "2024-03-30",
                "Service Name": "Dynamic Regulation HF",
                "Service Code": "DRH",
                "Tested Capacity": 90,
                "Unit of Measurement": "MW"
            },
            {
                "Date Approved by ITE": "2024-03-30",
                "Service Name": "Static FFR",
                "Service Code": "SFR",
                "Tested Capacity": 80,
                "Unit of Measurement": "MW"
            }
        ]
    }
]
}

```

## Response - Success

```

{
    "Transaction ID":"CL-0000001135",
    "Transaction Status":"Load Completed",
    "Transaction Type":"Inventory",

    "Action Type":"Update"
}

```

## Response - Failure

```

{
    "Transaction ID":null,
    "Transaction Status":"Load Failed",
    "Transaction Type":"Inventory",

    "Action Type":"Update",
    "Unit":
    {
        "Error Message":"Postcode: Missing Mandatory Field"
    }
}
}

```

## Notification - Failure

```

{
    {
        "Transaction Type": "Inventory",

```

```

"Transaction ID": "CL-0000001135",
"Transaction Status": "Process Error",
"Action Type": "Update",
"Units":
[
  {
    "Unit Key": "2000000000000333",
    "Error Message": "Unit Name: Missing Mandatory Field",
    "Unit Service":
    [
      {
        "Unit Service Name": "MyUnitService01",
        "Error Message": "Unit Service Name: Missing Mandatory Field"
      }
    ]
  }
],
"Assets": [
  {
    "Asset Id": "0000106721",
    "Error Message": "Operational Metering Availability: Missing Mandatory Field",
    "Asset Testing Services":
    [
      {
        "Asset Testing Service Name": "MyUnitService01",
        "Error Message": "Asset Testing Service Name: Missing Mandatory Field"
      }
    ]
  }
]
}

```

## Notification - Success

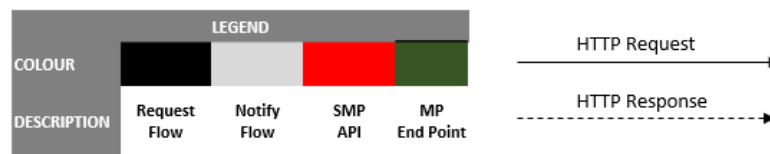
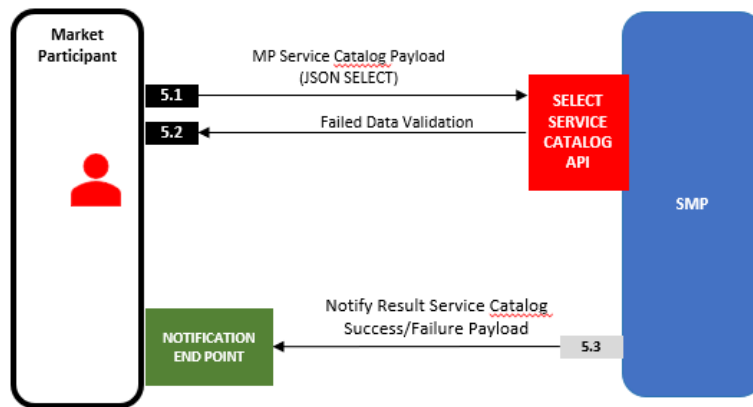
```

{
  "Transaction Type": "Inventory",
  "Transaction ID": "CL-0000000143",
  "Transaction Status": "Process Completed",
  "Action Type": "Update"
}

```

## API: Select Service Catalog

### Overview



| #   | Dataflow                       | Transfer Type | Payload                                                                                                                                   |
|-----|--------------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 5.1 | Submit Service Catalog Request | Request       |                                                                                                                                           |
| 5.2 | Transaction Response           | Response      | <ul style="list-style-type: none"> <li>Transaction ID</li> </ul>                                                                          |
| 5.3 | Notification                   | Request       | Service Catalog Transaction JSON file providing: <ul style="list-style-type: none"> <li>JSON file with Service Catalog details</li> </ul> |

## Payload Samples

### Notification - Success

```

{
  "Transaction Type": "Service Catalog",
  "Transaction Status": "Success",
  "Action Type": "Select",
  "Service Catalog": [
    {
      "Ancillary Service Name": "RDP MW Dispatch",
      "Service Effective From": "2022-12-21",
      "Service Effective To": "2032-12-21",
      "Service Type": "Reserve",
      "Service Code": "RDP"
    }
  ],
  {
    "Ancillary Service Name": "Dynamic Moderation HF",
    "Service Effective From": "2022-12-21",
  }
}
  
```

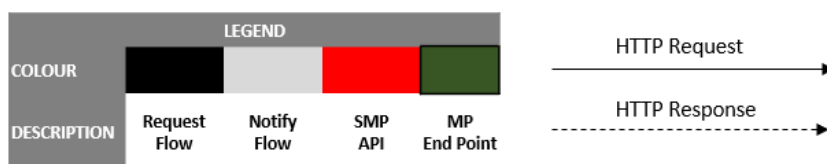
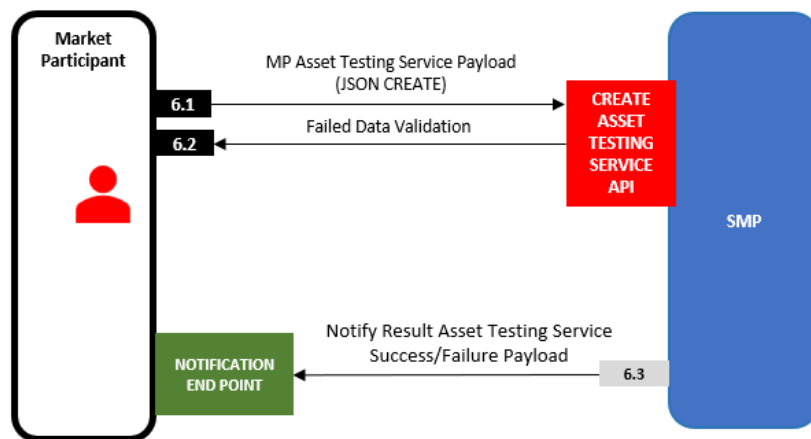
```

    "Service Effective To": "2022-12-21",
    "Service Type": "Response",
    "Service Code": "DMH"
  }
]
}

```

## API: Create Asset Testing Service

### Overview



| #   | Dataflow                                 | Transfer Type | Payload                                                                                                  |
|-----|------------------------------------------|---------------|----------------------------------------------------------------------------------------------------------|
| 6.1 | Submit Asset Testing Service Transaction | Request       | JSON Asset Payload                                                                                       |
| 6.2 | Transaction Response                     | Response      | One of: <ul style="list-style-type: none"> <li>Failed Data Validation</li> <li>Transaction ID</li> </ul> |

|     |              |                                                                                                                                                      |
|-----|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |              | Asset Testing Service Transaction JSON file providing:                                                                                               |
| 6.3 | Notification | Request                                                                                                                                              |
|     |              | <ul style="list-style-type: none"> <li>• Successful records with SMP Asset Testing Service ID</li> <li>• Unsuccessful records with errors</li> </ul> |

## Specification

### Request

The request is a simple JSON payload made up of 2 sections:

| Key                                                                                                                                                                         | Value                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <pre>{   &lt;Notify Block&gt;,    "Asset Testing Services":     [       {&lt;Create Asset Testing Service&gt;},       {&lt;Create Asset Testing Service &gt;}     ] }</pre> | <p>Information required for SMP API to notify of transaction completion – see “Model – Notify” for key-value pairs contained in <i>&lt;Notify Block&gt;</i></p> <p>Section containing information on the Assets to be loaded into SMP. It will consist of one or more instance of <i>&lt;Create Asset Testing Service &gt;</i>. See “Model – Create Asset Testing Service” for key-value pairs.</p> |

### Response

A successful response is a JSON payload made up of 2 sections

|                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <pre>{   &lt;Transaction Block&gt;,    "Asset Testing Services":     [       {&lt;Asset Testing Service Block&gt;},       {&lt;Asset Testing Service Block&gt;}     ] }</pre> | <p>Information to notify of transaction information – see “Model – Transaction” for key-value pairs contained in <i>&lt;Transaction Block&gt;</i></p> <p>Optional Section containing information on the Asset Testing Services to be loaded into SMP. It will consist of one or more instance of <i>&lt;Asset Testing Service Block&gt;</i>. See “Model – Create Asset” for key-value pairs.</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Notify

After a Create Asset Testing Service transaction has completed, the resulting notification will consist of a JSON payload made up of 2 sections

|                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <pre>{   &lt;Transaction Block&gt;,    "Asset Testing Services":     [       {&lt;Asset Testing Service Block&gt;},       {&lt;Asset Testing Service Block&gt;}     ] }</pre> | <p>Information to notify of transaction information – see “Model – Transaction” for key-value pairs contained in <i>&lt;Transaction Block&gt;</i></p> <p>Section containing information on the Asset Testing Services to be loaded into SMP. It will consist of one or more instance of <i>&lt;Asset Testing Service Block&gt;</i>. See “Model – Asset” for key-value pairs.</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

}

## Payload Models

### Model – Notify

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                   | Data Type | Example                         | Allowed Values / Pattern | Other Validation Rule |
|-----|-----------------------|-----------|---------------------------------|--------------------------|-----------------------|
| M   | Notification Address  | Text(255) | https://api.myco.com/SMPNotify/ |                          |                       |
| O   | Notification Username | Text(255) | MyUsername                      |                          |                       |
| O   | Notification Password | Text(255) | MyPassword                      |                          |                       |

### Model – Create Asset Testing Service

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag                 | Data Type    | Example                | Allowed Values / Pattern                        | Other Validation Rule |
|-----|---------------------|--------------|------------------------|-------------------------------------------------|-----------------------|
| M   | Asset Id            | Text(10)     | 7294652834             |                                                 |                       |
| M   | Date                |              |                        |                                                 |                       |
| M   | ApprovedDate by ITE |              | 23/06/2022             | DD/MM/YYYY                                      |                       |
| M   | Service Name        | Text (255)   | Dynamic Containment LF | Obtainable through 'Select Service Catalog' API |                       |
| M   | Tested Capacity     | Number(16,2) | 156.2                  |                                                 |                       |

### Model – Transaction

INDEX: M/O specifies if it is Mandatory or Optional to provide value in the Payload

| M/O | Tag | Data Type | Example | Allowed Values | Other Validation Rule |
|-----|-----|-----------|---------|----------------|-----------------------|
|-----|-----|-----------|---------|----------------|-----------------------|



|   |                    |          |                       |                                                |
|---|--------------------|----------|-----------------------|------------------------------------------------|
| O | Transaction ID     | Text(10) | CL-0000001135         | Will be null if payload fails basic validation |
| M | Transaction Status | Text(10) | Process Completed     | See Transaction State Diagram                  |
| M | Transaction Type   | Text(10) | Asset Testing Service | "Asset", "Unit", "Asset Testing Service"       |
| M | Action Type        | Text(10) | Create                | "Create"                                       |

## Payload Samples

### Request

```
{
  "Notification Address":"https://api.mycompany.com/SMPNotification",
  "Notification Username":"MyUsername",
  "Notification Password":"MyPassword",
  "Action Type":"Create",
```

```

    "Asset Testing Service": [{
      "Asset ID": "0000101618",
      "Tested Capacity": "5",
      "Date Approved by ITE": "2023-05-10",
      "Service Name": "Dynamic Containment LF"
    }, {
      "Asset ID": "0000101619",
      "Tested Capacity": "90",
      "Date Approved by ITE": "2023-03-01",
      "Service Name": "Dynamic Moderation LF"
    }, {
      "Asset ID": "0000101638",
      "Tested Capacity": "50",
      "Date Approved by ITE": "2023-01-30",
      "Service Name": "Dynamic Regulation HF"
    }
  ]
}

```

## Response - Success

```

{
  "Transaction ID": "CL-00000001135",
  "Transaction Status": "Load Completed",
  "Transaction Type": "Asset Testing Service",
  "Action Type": "Create"
}

```

## Response - Failure

```

{
  "Transaction ID": "CL-00000001135",
  "Transaction Status": "Load Failed",
  "Transaction Type": "Asset Testing Service",
  "Action Type": "Create",
  "Asset Testing Service": [
    {
      "Asset ID": "0000101618",
      "Service Name": "Dynamic Containment LF",
      "Error Message": "Service Name: Missing Mandatory Field"
    },
    {
      "Asset ID": "0000101619",
      "Service Name": "Dynamic Moderation LF",
      "Error Message": "Service Name: Missing Mandatory Field"
    }
  ]
}

```

## Notification - Failure

```

{
  "Transaction ID": "CL-00000001135",
  "Transaction Status": "Process Completed",
  "Transaction Type": "Asset Testing Service",
  "Action Type": "Create",
  "Asset Testing Services":
    {
      "Asset ID": "0000101618",
      "Tested Capacity": "5",
      "Date Approved by ITE": "2023-05-10",
      "Service Name": "Dynamic Containment LF",
      "Error Message": "Service Name: Missing Mandatory Field"
    }
}

```

## Notification – Success

```
"Transaction ID": "CL-0000001135",
"Transaction Status": "Process Completed",
"Transaction Type": "Asset Testing Service",
"Action Type": "Create",
"Asset Testing Service": [
  {
    "Asset ID": "0000101618",
    "Tested Capacity": "5",
    "Date Approved by ITE": "2023-05-10",
    "Service Name": "Dynamic Containment LF"
  },
  {
    "Asset ID": "0000101619",
    "Tested Capacity": "90",
    "Date Approved by ITE": "2023-03-01",
    "Service Name": "Dynamic Moderation LF"
  }
]
```

## Appendix A: Picklist Tables

### Boolean

#### Allowed Values

true, false

### Operational Metering Availability

#### Allowed Values

Yes, No

### Asset Markets

#### Allowed Values

Balancing Services, RDP MW Dispatch

### Unit Markets

#### Allowed Values

Balancing Services, Demand Flexibility Service

### Unit Types

#### Allowed Values

Generation Unit, Demand Unit

### Customer Base

#### Allowed Values

Domestic, I & C (Microbusiness), Both, Other

### Fuel Type

#### Allowed Values

Batteries, Batteries, Biomass, BM (SVA/VLP/Battery), CCGT, Coal, Diesel, DSF: Distributed generation (export), DSF: Distributed generation (on-site), DSF: Storage (export), DSF: Storage (on-site), Gas Reciprocating Engines, Interconnector, Load Response, Multi Fuel type, Non-Pump Storage Hydro, Nuclear, OCGT, Pump Storage, Solar, Wind, Other

## Categories

### Allowed Values

Primary BMU, Secondary BMU, Additional Supplier BMU, Non-BMU

## DFS Unit Type

### Allowed Values

Domestic, Industrial and Commercial, Hybrid

## DFS Initiation Measures

### Allowed Values

Manually instructed, Directly instructable, Both

## Are you a Supplier of Electricity

### Allowed Values

Yes, No

## Connection Type

### Allowed Values

Firm, Flexible

## Connection Method

### Allowed Values

Distribution, Private Lines, Transmission

## DNO

### Allowed Values

Electricity North West, ESB Networks, Northern Ireland Electricity Networks, Northern Powergrid, SP Energy Networks, Scottish and Southern Electricity Networks, UK Power Networks, National Grid Electricity Distribution

## Connection Point Voltage

### Allowed Values

400, 275, 132, 33, 11, 6.6, 3.3, Other

## GSP

### Allowed Values

ABHA\_1, ABNE\_3, ABTH\_1, ALDW\_31, ALDW\_32, ALNE\_3, ALVE\_1, AMEM\_1, ARBR\_3, ARMO\_3, AXMI\_1, AYRR\_3, BAGA\_3, BAIN\_3, BARK\_3, BEAU\_3, BEDD\_1, BERW\_3, BESW\_1, BICF\_1, BIRK\_1, BISW\_1, BLYT\_6, BOAG\_3, BOLN\_1, BONN\_3, BOTW\_1, BPGR\_3, BRAC\_3, BRAI\_1, BRAP\_3, BRAW\_1, BRED\_1, BRFO\_1, BRID\_3, BRIM\_1, BRK1\_1, BRL1\_1, BRL3\_1, BRLE\_2, BROA\_3, BROR\_3, BROX\_3, BRWA\_1, BUMU\_3, BURW\_1, BUSH\_1, BUST\_1, CAAD\_3, CAML\_6, CANT\_1, CAPE\_1, CAR1\_1, CARE\_1, CARR\_12, CASK\_3, CASS\_3, CATY\_3, CEAN\_5, CELL\_1, CHAP\_3, CHAR\_3, CHAS\_3, CHIC\_1, CHS2\_1, CHS3\_1, CHTE\_1, CITR\_1, CLAC\_5, CLAY\_3, CLYM\_3, COAT\_3, COCK\_3, COUA\_3, COVE\_1, COWL\_1, COYL\_3, CRAI\_3, CREB\_1, CROO\_3, CULJ\_3, CUMB\_3, CUPA\_3, CURR\_5, DEES\_1, DEVM\_3, DEVO\_3, DEWP\_3, DOUN\_3, DRAK\_1, DRAX\_1, DRCR\_3, DRUM\_3, DUBE\_3, DUDH\_3, DUGR\_3, DUMF\_3, DUMF\_5, DUNB\_3, DUNF\_3, DUNO\_3, DYCE\_3, EALI\_6, EASO\_1, ECCL\_3, ECLA\_1, EERH\_3, EKIL\_3, EKIS\_3, ELDE\_3, ELGI\_3, ELLA\_1, ELS2\_1, ELSA\_1, ENDE\_1, ERSK\_3, EXET\_1, FASN\_3, FAUG\_3, FAWL\_1, FECK\_6, FERB\_1, FERB\_6, FIDD\_3, FIDF\_1, FLEE\_1, FRAS\_3, FROD\_1, FWIL\_3, GALA\_3, GIFF\_3, GLAG\_3, GLLU\_3, GLNI\_3, GLOU\_1, GLRO\_3, GORG\_3, GOVA\_3, GRAN\_6, GREN\_1, GRIW\_1, GRMO\_3, GRTO\_6, GRUB\_3, HACK\_6, HAGR\_3,

HARI\_1, HARK\_13, HARM\_6, HAWI\_3, HAWP\_6, HCK1\_1, HELE\_3, HEYS\_1,  
 HUNF\_3, HURS\_1, HUTT\_1, IMPP\_3, INCE\_1, INDQ\_1, INKE\_3, INNE\_3,  
 IROA\_1, IRON\_1, IVER\_1, IVER\_6, JOHN\_3, JORD\_3, KAIM\_3, KEAD\_1,  
 KEAR\_1, KEAR\_3, KEIT\_3, KEMI\_1, KIBY\_1, KIER\_3, KIIN\_3, KILB\_3, KILB\_5,  
 KILO\_3, KILS\_3, KILT\_3, KILW\_3, KINO\_1, KINT\_3, KIRK\_1, KITW\_1, LACK\_6,  
 LAIR\_3, LALE\_1, LAND\_1, LEGA\_1, LEMR\_1, LEVE\_3, LING\_3, LINM\_3,  
 LINT\_6, LISD\_1, LITT\_1, LODR\_6, LOVE\_1, LUNA\_3, LYND\_3, MACC\_2,  
 MACD\_3, MANN\_1, MAYB\_3, MEAD\_1, MELK\_1, MILC\_3, MILH\_1, MITY\_1,  
 MOSW\_3, MYBS\_3, NAIR\_3, NEAR\_3, NECH\_11, NECH\_12, NEEP\_3,  
 NETS\_3, NEW1\_1, NEWX\_6, NFLE\_1, NHYD\_6, NINF\_1, NORL\_3, NORT\_2,  
 NORW\_1, NURS\_1, OCKH\_1, OFFE\_3, OLDB\_1, OSBA\_1, PADI\_1, PAIS\_3,  
 PART\_3, PEHG\_3, PEHS\_5, PELH\_1, PEMB\_1, PENE\_1, PENN\_1, PENT\_1,  
 PENW\_1, PERS\_3, PITS\_31, PITS\_32, POOB\_3, POPP\_3, PORA\_3, PORD\_3,  
 PYLE\_1, RAIN\_1, RANN\_3, RASS\_1, RATS\_1, RAVE\_3, RAYL\_1, REBR\_3,  
 REDH\_3, REDM\_3, RICH\_1, ROCH\_1, ROCK\_1, RUGE\_1, RYEH\_1, SACO\_3,  
 SALH\_1, SANX\_3, SEAB\_1, SEL1\_1, SELL\_1, SFEG\_5, SFEM\_5, SFIL\_3,  
 SHEC\_3, SHEE11, SHIN\_5, SHRE\_1, SHRU\_3, SIGH\_3, SJOW\_1, SKLG\_1,  
 SLOY\_5, SMAN\_1, SPAV\_3, SPEN\_1, SSHI\_3, STAH\_1, STAL\_1, STAY\_1,  
 STEW\_1, STHA\_3, STIR\_3, STLE\_3, STMO\_1, STOB\_1, STRI\_3, SUND\_1,  
 SWAN\_1, SYD1\_1, TARL\_3, TAUN\_1, TAYN\_3, TELR\_3, TEMP\_3, THOM\_6,  
 THSO\_3, THUR\_6, TILB\_11, TILB\_12, TINP\_31, TINP\_32, TODP\_6, TONG\_5,  
 TOTT\_1, TRAW\_1, TREM\_3, TUMB\_3, TYNE\_1, TYNE\_5, UPPB\_1, UPPB\_3,  
 USKM\_1, USKM\_3, WALP\_1, WARL\_1, WASF\_1, WATS\_1, WBOL\_6, WBUR\_1,  
 WFIE\_3, WGEO\_3, WHAM\_1, WHGA\_1, WHHO\_3, WHSO\_2, WHTL\_3,  
 WIBA\_3, WIEN\_1, WILL\_1, WILT\_6, WIM2\_1, WIMB\_11, WIOW\_3, WISD\_1,  
 WISD\_6, WISH\_3, WMEL\_1, WOHI\_3, WTHU\_3, WWEY\_1, WYLF\_1,  
 WYMO\_1, Others

## GSP Group

### Allowed Values

Eastern England, East Midlands, London, Merseyside and Northern  
 Wales, West Midlands, North Eastern England, North Western England,  
 Northern Scotland, Southern Scotland, South Eastern England,  
 Southern England, Southern Wales, South Western England, Yorkshire

## Country (Telephone)

### Allowed Values

United Kingdom, Afghanistan, Albania, Algeria, American Samoa, Andorra, Angola, Anguilla, Antarctica, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bermuda, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, British Indian Ocean Territory, British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Cayman Islands, Central African Republic, Chad, Chile, China, Christmas Island, Cocos Islands, Colombia, Comoros, Cook Islands, Costa Rica, Croatia, Cuba, Curacao, Cyprus, Czech Republic, Democratic Republic of the Congo, Denmark, Djibouti, Dominica, Dominican Republic (+1809), Dominican Republic (+1829), Dominican Republic (+1849), East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Falkland Islands, Faroe Islands, Fiji, Finland, France, French Polynesia, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Greenland, Grenada, Guam, Guatemala, Guernsey, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Isle of Man, Israel, Italy, Ivory Coast, Jamaica, Japan, Jersey, Jordan, Kazakhstan, Kenya, Kiribati, Kosovo, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Libya, Liechtenstein, Lithuania, Luxembourg, Macao, Macedonia, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Marshall Islands, Mauritania, Mauritius, Mayotte, Mexico, Micronesia, Moldova, Monaco, Mongolia, Montenegro, Montserrat, Morocco, Mozambique, Myanmar, Namibia, Nauru, Nepal, Netherlands, Netherlands Antilles, New Caledonia, New Zealand, Nicaragua, Niger, Nigeria, Niue, North Korea, Northern Mariana Islands, Norway, Oman, Pakistan, Palau, Palestine, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Pitcairn, Poland, Portugal, Puerto Rico (+1787), Puerto Rico (+1939), Qatar, Republic of the Congo, Reunion, Romania, Russia, Rwanda, Saint Barthelemy, Saint Helena, Saint Kitts and Nevis, Saint Lucia, Saint Martin, Saint Pierre and Miquelon, Saint Vincent and the Grenadines, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Singapore, Sint Maarten, Slovakia, Slovenia, Solomon Islands, Somalia, South Africa, South Korea, South Sudan, Spain, Sri



Lanka, Sudan, Suriname, Svalbard and Jan Mayen, Swaziland, Sweden, Switzerland, Syria, Taiwan, Tajikistan, Tanzania, Thailand, Togo, Tokelau, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Turks and Caicos Islands, Tuvalu, U.S. Virgin Islands, Uganda, Ukraine, United Arab Emirates, United States, Uzbekistan, Vanuatu, Vatican, Venezuela, Vietnam, Wallis and Futuna, Western Sahara, Yemen, Zambia, Zimbabwe

## Telephone Available From/To

**Allowed Values**

## Appendix B: General Errors

When errors are encountered in an API request, a technical error payload will be sent. The table below includes the list of error codes, descriptions and details which can be received.

| HTTPS Error Code          | Issue                 | Details                                                                                                                                                                                                                                                                                               |
|---------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 401 Unauthorized          | Invalid token         | <p>The token has failed validation. This may be for one of the following reasons:</p> <ul style="list-style-type: none"><li>• Token was not generated by NESO</li><li>• Token has been modified so the signature fails validation</li><li>• Token has expired</li><li>• Token is incomplete</li></ul> |
| 400 Bad Request           | Invalid Grant         | <p>The token provided does not have a valid grant for this application. This may be because you haven't been granted access privileges for this API. Or Username or password Incorrect</p>                                                                                                            |
| 400 Bad Request           | Bad Request           | <p>If there is issue with the Payload, e.g. Mandatory fields are missing or wrong, e.g.</p> <ul style="list-style-type: none"><li>• Invalid datatype</li><li>• Parameter has invalid length/format</li></ul>                                                                                          |
| 404 Not Found             | Not Found             | <p>Wrong URL used</p>                                                                                                                                                                                                                                                                                 |
| 500 Internal Server Error | Internal Server Error | <p>An unknown error has occurred within the API Endpoint. If this recurs, please contact support</p>                                                                                                                                                                                                  |

## Appendix C: Version History

| Version | Date                      | Scope of Change                                                       |
|---------|---------------------------|-----------------------------------------------------------------------|
| 1.00    | 25 <sup>th</sup> Nov 2022 | First External Release                                                |
| 1.00a   | 1 <sup>st</sup> Dec 2022  | Update to Diagram Keys                                                |
| 1.01    | 6 <sup>th</sup> Jan 2023  | Minor updates                                                         |
| 1.01a   | 24 <sup>th</sup> Jan 2023 | Updates to Data Models and Payload Samples                            |
| 1.02    | 20 <sup>th</sup> Jun 2023 | New APIs for Select Service Catalog and Create Asset Testing Services |
| 1.03    | 8 <sup>th</sup> Apr 2024  | New APIs for Select Asset and Unit                                    |
| 1.04    | 29 <sup>th</sup> Jul 2024 | New API for Update Inventory                                          |
| 1.05    | 19 <sup>th</sup> Sep 2024 | Rebranded for NESO                                                    |
| 1.06    | 16 <sup>th</sup> May 2025 | Updated model and payloads for BM Registration information.           |
| 1.07    | 16 <sup>th</sup> Aug 2025 | Updated model and payload for BM Registration information.            |
| 1.08    | 29 <sup>th</sup> Oct 2025 | New API for Create MPAN Pair                                          |