# SDP-02 Information Session

Market Participant

Information Session: 2nd October 2025

# SDP-02 (ESPS) Information Session (2nd October 2025)

## Agenda for today's session

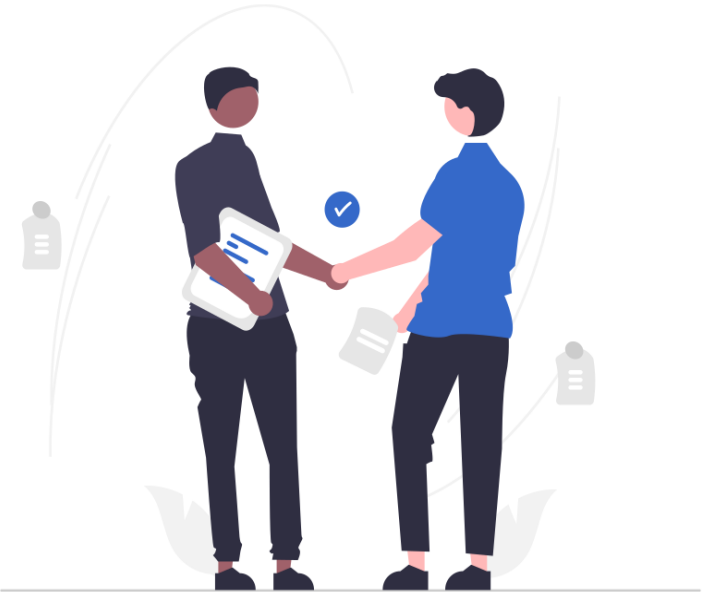
| # | Time | Segment/Programme | Topic Detail |
|---|---|---|---|
| 1 | 13:00 – 13:05 | Introduction & Housekeeping | • Meeting Agenda & Guidelines Overview. |
| 2 | 13:05 – 13:15 | SDP-02 Delivery Timeline Overview | • Update on the status of key SDP-02 delivery activity. |
| 3 | 13:15 – 13:40 | SDP-02 Cutover Guide Walkthrough | • Walkthrough of SDP-02 Cutover Guide including cutover data requirements. |
| 4 | 13:40 – 13:45 | Market Participant Support & Engagement Overview | • Overview of market participant engagement activity for the SDP-02 initiative. |
| 5 | 13:45 – 13:55 | Battery PN Feasibility Check | • Battery PN Feasibility Check Walkthrough. |
| 6 | 13:55 – 14:05 | Questions & Closing Remarks | • Time allocated for questions & closing remarks. |
| | | Event Close | |

# SDP-02 (ESPS) Information Session

## Setting Expectations

### Meeting Guidelines

1. **Stay on Topic: SDP-02 (ESPS) Focus**
   - Please keep the discussion focused on the SDP-02 (ESPS) initiative.
2. **Engage Fully:**
   - This session is for you!
   - Actively listen and ask questions when appropriate.
3. **Be Respectful:**
   - Don’t interrupt or talk over others.
   - Allow everyone the time and space to participate in the discussion.
4. **Be Time-Aware:**
   - Questions are welcome but will be **time-limited.**



# SDP-02 (ESPS) Information Session – Participant Questions

- Questions can be submitted via Slido using the QR code shown below or www.slido.com and using the code 4016478
- Please provide your name and organisation when asking questions via the Slido.
- While questions on all elements of the SDP-02 initiative are welcome, queries relating to the material presented on this call will be prioritised.
- Questions from market participants operating units in scope for SDP-02 will be prioritised but input and queries are welcome from all market participants.
- Questions will be answered in the upvoted order whenever possible. We will take questions from further down the list when: the answer is not ready; we need to take the question away or the topic is outside of the scope of SDP-02 (ESPS).
- Slido will remain open after the meeting ends, to provide the maximum opportunity for you to ask questions.

Ask questions anytime at:
SchedulingandDispatch@Eirgrid.com
SchedulingandDispatch@soni.ltd.uk

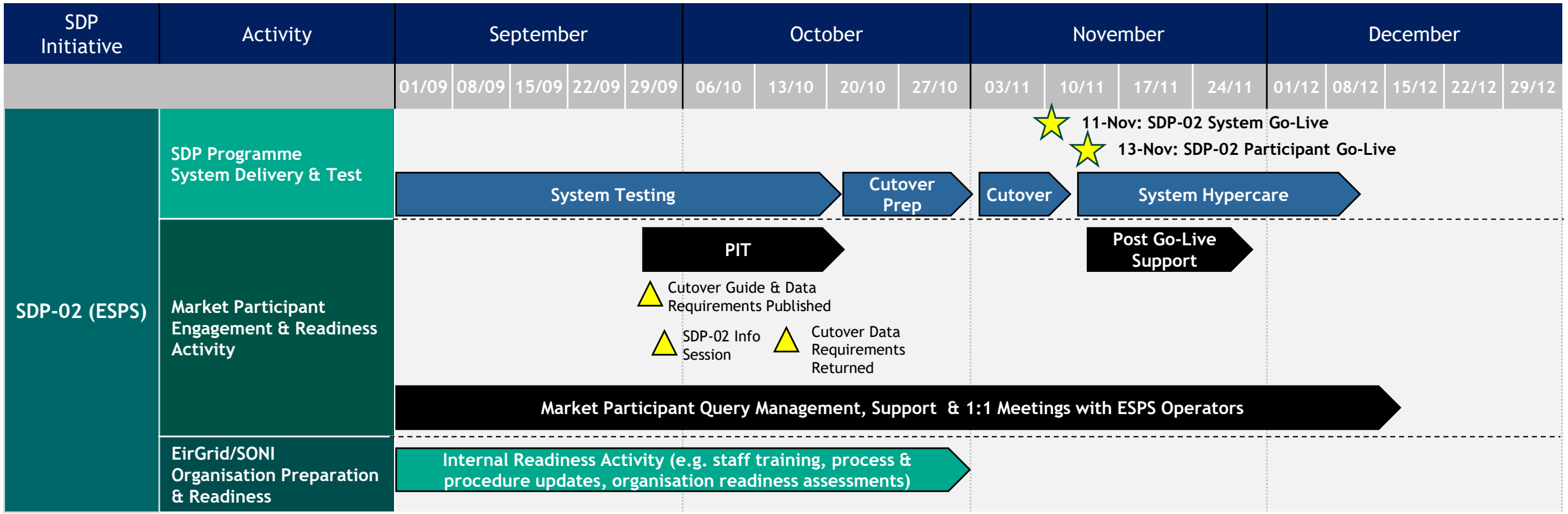
Slido Code: 4016478

# SDP Delivery Timeline Update

Slido Code: 4016478

# SDP-02 Delivery Roadmap

The below plan on a page outlines the key delivery activity and target milestones for the SDP-02 initiative.




## SDP-02 (ESPS) Delivery Status

- The SDP programme is progressing with test execution, internal readiness, and cutover preparation activities in line with the delivery plan.
- Access to the Participant Interface Testing (PIT) environment for SDP-02 was opened on 29/09 and will be available until 17/10.
- The SDP-02 Market Participant Cutover Guide and the required data templates to be completed by battery unit operators by 15/10 were shared with battery unit operators on 30/09.
- 'Overview of SDP Solution for Battery Units V2.0' is being finalised in advance of sharing with market participants.

EirGrid semo Single Electricity Market Operator SONI

Slido Code: 4016478

# SDP-02 Cutover & Data Requirements

Slido Code: 4016478

# SDP-02 (ESPS) Participant Cutover Guide

**The information below outlines the key changes for Market Participants to MMS & EDIL Systems from the SDP-02 (ESPS) Initiative.**

## MMS System Changes

### Registration

ESPS specific fields are detailed below:

**New Elements:**

- Battery Storage Fuel Type

**Existing Elements:**

- Maximum Storage Capacity
- Minimum Storage Capacity
- Dispatchable Flag
- Minimum Generation

### Technical Offer Data

ESPS specific fields are detailed below:

**New Elements:**

- Storage Cycle Efficiency

**Existing Elements:**

- Minimum Stable Generation Quantity
- Block Load Flag
- Maximum On Time
- Minimum On Time
- Minimum Off Time
- Ramp Up / Down Rate 1
- Ramp Up / Down Quantity 1
- Ramp Up / Down Rate 2,3,4 & 5
- Ramp Up / Down Quantity 2,3,4 & 5

### Commercial Offer Data (Complex)

ESPS specific fields are detailed below:

**New Elements:**

- Operational Maximum Storage Quantity
- Operational Minimum Storage Quantity

**Existing Elements:**

- Hot Startup Cost
- Warm Startup Cost
- Cold Startup Cost
- No Load Cost
- Minimum MW
- Minimum Output MW

### Commercial Offer Data (Complex & Simple)

- System will have the ability to handle negative quantities as part of Price-Quantity pair.

### Physical Notification

- System will have the ability to handle negative From MW and To MW values.

### Reports

- ESPS units will appear within existing reports
- Addition of ESPS Storage Cycle Efficiency and Operational Minimum & Maximum Storage value for ESPS Units will be visible in applicable reports.

## EDIL System Changes

### Registration

- ESPS units are currently registered using the existing process for “Battery Storage” units.

### Dispatch Instructions

- Dispatch Type MWOF will be extended for ESPS units to accommodate negative value (“charging”)
- MWOF will also allow up to 3 decimal points, which will feed downstream to MMS calculations.

### Declarations

The below declarations for ESPS units can now support negative values:

- Minimum Generation Available MW (MNMW)
- Reserve Provision Threshold MW (RPT)
- Name Plate Rated Minimum Output MW (PMNMW).

** All specific validations for the above field elements can be found within the ISEM Technical Specification and SEMO Data Publication Guide*

# SDP-02 (ESPS) Participant Cutover Guide

## Go-Live Timeline

### October 2025

**01/10/25 — Data Request**

Requests for participants to confirm their registration data and TOD data.

**15/10/25 — Data Deadline**

Data: Deadline for Data Request Completion

**21/10/25 — EDIL**

EDIL: Code Deployment of SDP Changes

### November 2025

**10/11/25 — MMS Code Deployment**

MMS: Code Deployment of Release N – Market System Outage to begin at 20:00 and to continue until completion

**12/11/25 — Data Conversion & Injection**

1. MPI Outage & Imbalance Pricing is Offline
2. Registration Conversion Script Ran
3. Internal Validations to confirm data conversion script ran successfully
4. TOD Data Injection Script Run
5. Approval of new TOD files
6. Outage Completion – Imbalance Pricing is Online

- ESPS units will be live within the Balancing Market at next trading day (23:00 12th).
- Participants are requested to review all existing Commercial Offer Data, Technical Offer Data and Physical Notification files within the MPI.
- New actions such as negative Physical Notifications may now be submitted.

### Additional Information

Further details regarding dates related to specific line items such as Data Requests, System Outages and Code Deployments can be found within the SDP-02 Participant Runbook.

Link to the document can be found here:

SDP02 Participant Runbook

# SDP-02 (ESPS) Participant Cutover Guide

## System Code Deployments & Outages

Throughout the SDP-02 Cutover window, there will be various market outages occurring while the new SDP code is deployed to the application.

### 21/10/25 — EDIL

**Outage Window**

During Working Hours

**Impact to Participants:**

- EDIL DWC Client will not be accessible within the NCC.
- All Dispatch Instructions will have to be issued manually (over the phone) during the outage window.
- Imbalance Pricing will be offline during this outage – the Market Back-Up Price will be active.

### 05/11/25 — EMS

**Impact to Participants:**

- No impact to Market Participants as the EMS is internally facing.
- No outage is necessary during the EMS Cutover.

### 10/11/25 — MMS (SDP-02 Code Deployment)

**Outage Window**

20:00 - Completion

**Impact to Participants:**

- Full Market Outage required as per the Bi-Annual Market Release plan.
- Participants can not submit as input data to the MPI until the outage is complete on the 11th.
- Imbalance Pricing will be offline during this outage – the Market Back-Up Price will be active.
- ESPS units will remain as “Multi-Fuel” units after this code deployment release.

### 12/11/25 — MMS Data Conversion/Injection

**Outage Window**

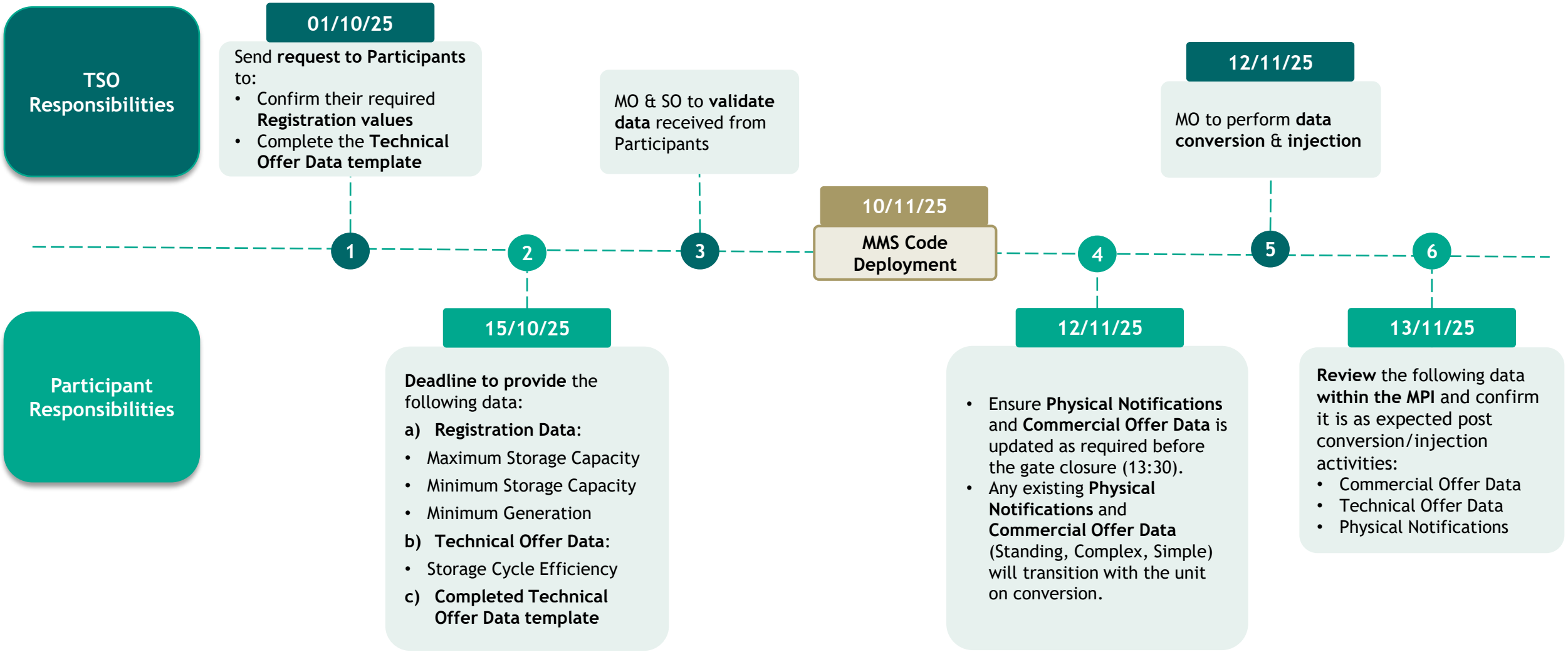
Afternoon

**Impact to Participants:**

- The MPI will be inaccessible and Imbalance Pricing will be offline during this outage - the Market Back-Up Price will be active.
- Participants can not submit input data to the MPI until the outage is complete.
- Balancing Market scheduling workflows will be offline during the outage.
- ESPS units will become active as “Battery Storage” units on the next trading day (23:00 12th).

# SDP-02 (ESPS) Participant Cutover Guide

## Data Requirements Summary & Timeline




**Standing COD must need to be updated by the Participant if they wish to include default values for Operational Maximum Storage Quantity and Operational Minimum Storage Quantity. Otherwise, the unit's default registration values will be applied for these elements.*

# SDP-02 (ESPS) Participant Cutover Guide

## Data Requirements

### Data Conversion & Injection Process

- As the SDP-02 initiative looks to integrate Battery units to the Balancing Market, an activity must take place within the Market Management System (MMS) to convert existing units. Currently, all Battery units are registered as “Multi-Fuel” units within the MMS. To enable the MO to convert these units and activate the Battery functionality, Participants must confirm the registration values for Maximum Storage Capacity, Minimum Storage Capacity and Minimum Generation as well as their TOD Storage Cycle Efficiency. For the conversion process, the MO and SO will validate the submitted data and permitting this data to be written into the database.
- Following this, the MO must undertake a data injection process to ensure that all input data is submitted and available for Battery units. Unit’s current Commercial Offer Data and Physical Notifications do not require update and will be preserved as the unit is converted to a Battery unit. However, the unit’s Technical Offer Data will not be viable due to the new Storage Cycle Efficiency element which is mandatory for submission. The MO requests all Participants to complete the Technical Offer Data template accompanying this document.
- As mentioned previously in this guide, the Data Conversion and Injection activities are scheduled for the 12th of November, with ESPS units set to become active as “Battery Storage” units on the next trading day (23:00 12th). This is to allow for the completion of the MMS code deployment and validation that all changes have been implemented correctly before introducing Battery units to the Balancing Market.

### Data Request to Participants

Upon receiving the data request, Participants must confirm their required registration values and complete the Technical Offer Data template no later than the **15th of October**. This will allow the MO to complete all relevant data validation checks and preparations ahead of the Data Conversion and Injection activities on the 12th of November.

**Data Submission**

- Participant has returned their required registration values and can be considered within the registration conversion process.
- Participant has also returned their complete Technical Offer Data template and is included within the TOD injection process.
- The Participant’s battery storage unit will be live in the Balancing Market from 23:00 on the 12th of November (Trading Day 13th) and will be available to be scheduled and dispatched.

**Non-Data Submission**

- Should Participants not return their required registration values and/or completed Technical Offer Data template, the unit will fail to be included within the unit conversion process.
- Participants who fail to return their data submission will not be compliant with the Trading and Settlement Code and will not avail of the new Battery Storage functionality.
- Further details can be found on the next slide.

# SDP-02 (ESPS) Participant Cutover Guide

## Non-Submission of Data Requirements

Participants who fail to return their data submission by the 15th of October will not be included within the SDP-02 Go-Live on the 12th of November.

### T&SC and Grid Code Compliance

- Failure by a participant to return the required data submission or completed Technical Offer Data template will constitute non-compliance with the Trading and Settlement Code and/or the Grid Code.
- In accordance with Section B.7.2.1 of the Trading and Settlement Code, the following data must be provided:
  - Initial Default Data in respect of each Generator Unit that may be used by the Market Operator in relation to that unit;
  - Such other Registration Data as is required by the Market Operator pursuant to the Appendix H "Data Requirements for Registration" and Agreed Procedure 1.
- Please refer to Appendix H (Data Requirements for Registration) and Appendix I (Offer Data) which sets out the data requirements for the registrations and the components of Technical Offer Data. Participants are reminded that the provision of such data forms part of their obligations under the Trading and Settlement Code.
- In accordance with Section B.7.6.21 of the Trading and Settlement Code, where the Market Operator identifies incorrect or incomplete data, the Market Operator will notify the Participant, who shall be obliged to amend and resubmit the data accordingly.
- Finally, as per Section SDC1.4.3.2 of the Grid Code, each generator shall use reasonable endeavours to ensure their declared availability and technical parameters always reflect their actual capabilities. The TSO reserves the right to reject declarations where they do not meet the generator's requirements.

### Battery Storage vs Multi Fuel

- Failure by a Participant to return the required data submission will result in their unit being unable to utilise the "Battery Storage" functionality and will instead remain classified as a "Multi-Fuel" unit.
- A non-exhaustive list of this unutilised functionality is as follows:
  - Negative MW values shall not be applied within Physical Notifications, indicating when the unit would be within a "charging state".
  - Negative Quantities shall not be applied within Commercial Offer Data.
  - Units shall not utilise the Follow-PN scheduling approach.
  - Unit shall not be included within the energy and reserve scheduling optimisation (LTS, RTC, RTD).
  - Unit shall not be dispatched to a negative MW level.
  - Unit shall not submit a negative declaration (MNMW).
  - Unit shall be settled in line with its current "Multi-Fuel" calculations.

# SDP-02 (ESPS) Data Requirements - Key Points to Note

The below outlines the key information for battery unit operators to be aware of when completing the Registration Data CSV file and VTOD XML file.

## Registration Data CSV File

The Registration Data CSV template has been pre-populated with your Unit's planned go-live values. Please review each row carefully and:

1. Confirm that the values are correct and can be used for live operation, Or
2. Update any fields where the data needs correction.
3. If updates are made, please document them in the 'Comments' section of the CSV template or in a separate note, explicitly stating what values were changed and why.

Further details on how to complete the CSV template are included in the CSV Completion Guide which has been shared with battery unit operators.

Completed registration data CSV files must be returned to the SDP team **by 15th October.**

## VTOD XML File

This submission will apply for VTOD Set 1 and will be the default VTOD Set for the unit.

1 XML file is to be completed for each unit operated.

Each XML file should be named using the format:
VTOD_<ParticipantName>_<ResourceName>.xml
For Example: VTOD_PT400001_GU_400001

Further details on how to complete the XML template are included in the TOD Completion Guide which has been shared with battery unit operators.

Completed XML files must be returned to the SDP team **by 15th October.**

EirGrid SONI semo Single Electricity Market Operator

Slido Code: 4016478

# SDP-02 Market Participant Engagement Overview

Slido Code: 4016478

# Scheduling and Dispatch - SDP-02 (ESPS) Engagement Summary

This below provides a summary of the SDP Programme engagement with market participants for the SDP-02 (ESPS) initiative.

## What has been done so far?:

- Over 4 weeks of Participant Interface Testing (PIT) environment access made available to battery unit operators
- Overview Document of SDP Solution for Battery Units shared with battery unit operators.
- '1:1 meetings' held with battery unit operators to discuss SDP-02 solution and market participant queries.
- SDP Programme has responded to 60+ queries in relation to SDP-02 (ESPS) initiative that have been shared via SDP mailbox.
- SDP-02 Market Participant Cutover Guide shared with battery unit operators.

## What is in progress? :

- Participant Interface Testing (PIT) environment access is open and available until 17th October.
- Information session held with battery unit operators to discuss SDP-02 Cutover plan and data requirements.
- 1:1 Bilateral Meetings (Upon request).

## What is scheduled to take place:

- Overview Document of SDP Solution for Battery Units V2.0 to be shared with battery unit operators.

EirGrid semo Single Electricity Market Operator SONI

Slido Code: 4016478

# Battery PN Feasibility Check Walkthrough

Slido Code: 4016478

# Battery PN Feasibility Check Walk-Through

Scheduling systems will not be optimising against energy limits and will only follow PN for batteries. The Control Centres will need to be able to assess whether PNs submitted are feasible in order to create secure indicative operations schedules.

The PN Feasibility Checker is a new decision support tool taking data from market registration, COD, TOD, EDIL declarations and SCADA signals. It will generate a forecast of energy remaining based for all energy limited units to inform the Control Centres on how they can be included in the Scheduling & Dispatch processes.

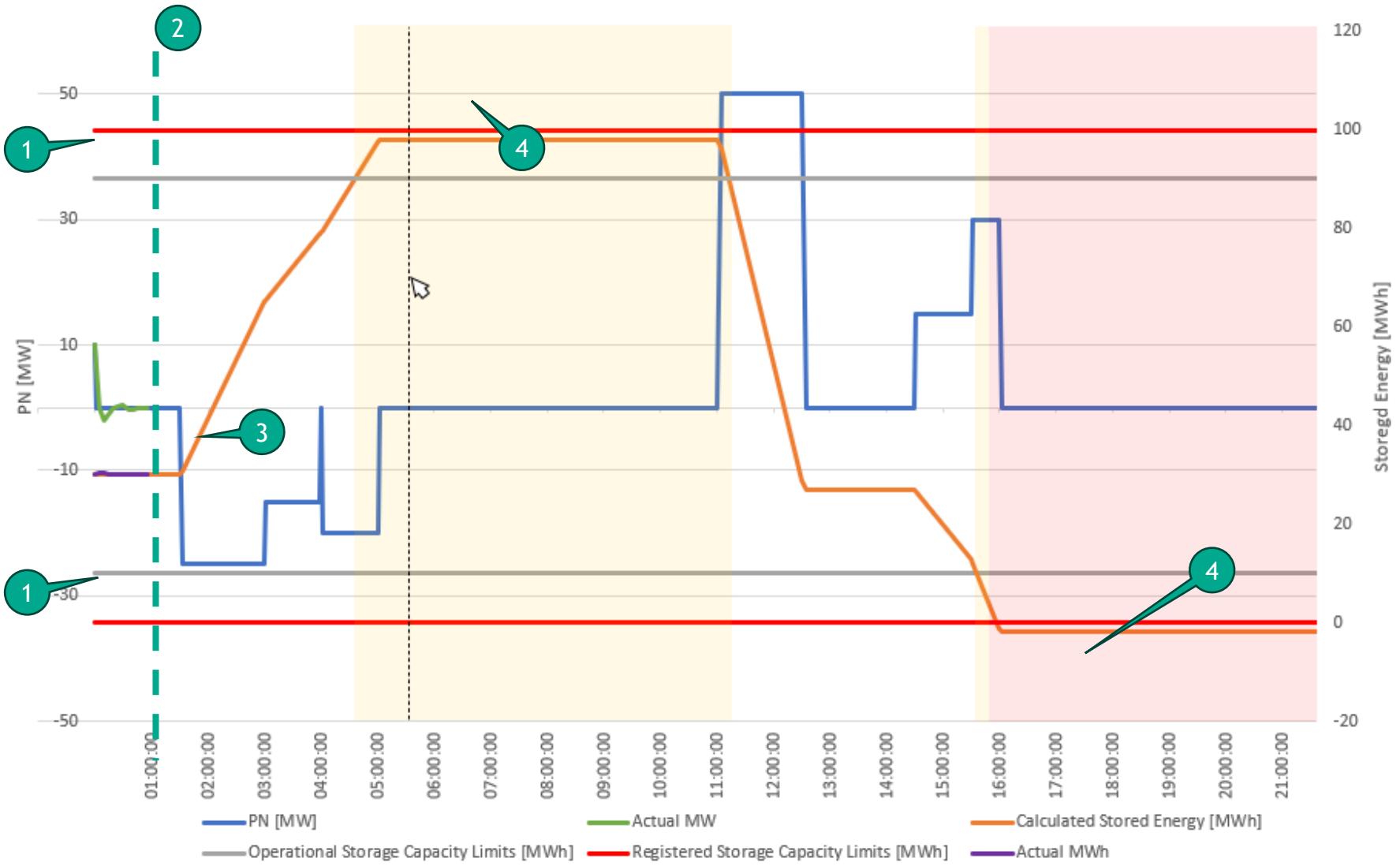
Inputs:

- Registered Min/Max Storage Quantity (MWh) – Registration Values
- Operational Min/Max Storage Quantity (MWh) – Commercial Offer Data
- Remaining Export/Import Energy (MWh) – SCADA Signal
- Available Export/Import (MW) – EDIL Declaration & SCADA Signal
- Physical Notifications (MW)
- Storage Cycle Efficiency - TOD
- Current Output – SCADA Signal

EirGrid semo Single Electricity Market Operator SONI

Slido Code: 4016478

# PN Feasibility Assessment




## Steps:

1. Max & Min Storage Quantities - Registered & Operational - applied to graph.
2. Current output (MW) & remaining export energy (MWh) are picked as starting point.
3. A forecasted state of charge (SOC) is calculated for the day using submitted PNs, storage cycle efficiency and the above data (1 & 2).
4. Forecasted SOC is reviewed for breaches of registered & operational limits.
5. Unit may be excluded from Scheduling depending on severity of breach.

EirGrid semo Single Electricity Market Operator SONI

Slido Code: 4016478

# What do participants need to know?

- SCADA signals, Operational Min/Max (MWh) COD submissions and Registered Min/Max (MWh) all play a part in the assessment of feasibility.
- If any of this data is incorrect it could influence scheduling and dispatch processes adversely so action may be taken to mitigate this.
- Example: The forecasted energy remaining (MWh) uses the SCADA signal for export energy remaining (MWh) as a starting point. Any errors in this signal may result in the PN feasibility check highlighting a breach in limits and causing units to be excluded from scheduling and/or dispatch

Slido Code: 4016478

# Questions

Slido Code: 4016478

# Questions

Slido Code: 4016478

# Thank you

EirGrid SONI semo Single Electricity Market Operator