

CP Progression Paper

Demand Control Event Settlement Adjustment Process Clarifications

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About This Document



Not sure where to start? We suggest reading the following sections:

- Have 5 mins? Read section 1
- Have 15 mins? Read sections 1, 4, 5 and 6
- Have 30 mins? Read all sections
- Have longer? Read all sections and the annexes and attachments

This document provides information on a new Change Proposal (CP) and outlines our proposed progression timetable for this change, including when it will be issued for CP Consultation in the next suitable Change Proposal Circular (CPC) batch.

We are presenting this paper to the Imbalance Settlement Group (ISG) and Supplier Volume Allocation Group (SVG) on 1 March 2022 to capture any comments or questions from Committee Members on this CP before we issue it for consultation.

There are four parts to this document:

- This is the main document. It provides a summary of the solution, impacts, anticipated costs, and proposed implementation approach, as well as our proposed progression approach for this CP.
- Attachment A contains the CP proposal form.
- Attachment B contains the proposed redlined changes to CSDs to deliver the CP solution.
- Attachment C contains the proposed redlined changes to Market Messages to deliver the CP solution.



Committee

Imbalance Settlement Group (ISG) and Supplier Volume Allocation Group (SVG)



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What is a DCE?

A Demand Control Event is a last resort action that can be used by National Electricity Transmission System Operator (NETSO) in situations where it is unable to call upon sufficient generation. It can be used to instruct a reduction in demand through voltage reduction or disconnection.

Why change?

The Settlement Adjustment Processes (SAPs) that were performed immediately after the Demand Control Event (DCE) that occurred in August 2019 ([DCE00201](#)) were hindered by a lack of clarity and consistency in the relevant Balancing and Settlement Code Procedures (BSCPs). This CP delivers against some of the recommendations of [Issue 89](#) 'Ensuring Demand Control Event procedures remain fit for purpose', which was raised as a 'lessons learned' exercise after the DCE.

Solution

This CP proposes amendments to the Code Subsidiary Documents (CSDs) relevant to DCEs to ensure they are consistent and clear. The relevant CSDs are:

- [BSCP03 'Data Estimation and Substitution for Central Volume Allocation'](#);
- [BSCP502 'Half Hourly Data Collection for SVA Metering Systems Registered in SMRS'](#);
- [BSCP503 'Half Hourly Data Aggregation for SVA Metering Systems Registered in SMRS'](#);
- [BSCP504 'Non Half Hourly Data Collection for SVA Metering Systems Registered in SMRS'](#);
- [BSCP505 'Non Half Hourly Data Aggregation for SVA Metering Systems Registered in SMRS'](#);
- [BSCP508 'Supplier Volume Allocation Agent'](#); and
- [BSCP515 'Licensed Distribution'](#).

Impacts and costs

As the proposed changes are clarifications of an existing process, rather than amendments, the impacts are expected to be minor. There will be a positive impact to BSC Parties and Party Agents due to the improved clarity and communication around SAPs, resulting in more efficient processes.

This change will affect several BSCPs, but will have no central system changes required.

The central implementation costs for this CP will be less than £2,000 to implement the relevant document changes.

Implementation

The CP is proposed for implementation on 3 November 2022 as part of the standard November 2022 BSC Release, as this is the first available release. This CP should be implemented as soon as possible to ensure clarity and consistency if another DCE takes place.

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2. Why Change?

What is the issue?

A DCE occurred in August 2019 ([DCE00201](#)). The SAPs that were performed immediately after the DCE were hindered by a lack of clarity and consistency in the relevant BSCPs. [Issue 89](#) 'Ensuring Demand Control Event procedures remain fit for purpose' was raised as a 'lessons learned' exercise to determine exactly what these difficulties were and how they could be resolved or mitigated for any future events. This CP delivers against the recommendations of Issue 89, which were approved by the Workgroup and the BSC Panel.

Background

Demand Control Event

In the event that National Electricity Transmission System Operator (NETSO) is unable to meet the current demand on the Total System, either through increased generation or reduction in demand, then Demand Control can be used as a last resort. [Grid Code Section OC6 'Demand Control'](#) details the provisions to be carried out to manage the situation. This enables NETSO to instruct Licensed Distribution System Operators (LDSOs) to reduce demand on their distribution systems, through;

- Demand disconnection;
- Voltage reduction; and
- Automatic Low Frequency Demand Disconnection (ALFDD).

Under these provisions, an LDSO would typically be required to reduce demand in blocks of approximately 5% of its total demand, and is required to respond to NETSO's instruction within five minutes of it being issued. It is usually left to the LDSO to determine how it achieves the instructed reduction by implementing a pre-determined plan agreed between NETSO and the LDSO, which will often be through a combination of demand disconnection and voltage reduction. A DCE is the term given to the period when Demand Control is in effect. The ALFDD process is delivered automatically based on pre-configured demand reduction patterns.

Settlement Adjustment Processes

SAPs were implemented in 2015 as part of [P305 'Electricity Balancing Significant Code Review Developments'](#), a Modification that was raised to progress the outcomes of Ofgem's [Electricity Balancing Significant Code Review \(EBSCR\)](#). One of the EBSCR's key outcomes was the requirement to add Demand Control actions into the calculation of Imbalance prices. P305 introduced the requirement for Elexon, certain BSC Parties and Party Agents to work together to estimate the amount of electricity that would have been Imported or Exported by disconnected customers. The process then makes sure this is reflected in Trading Parties Imbalance volumes, and ultimately the Imbalance charges they pay.

The reason that SAPs were deemed necessary, is because a DCE is an urgent emergency action taken by NETSO, not an action voluntarily taken by a Party and its customers, which may cause Parties' Imbalance volumes to be longer than they might otherwise have been. A longer Imbalance position multiplied by an abnormally high System Price driven by the effect of a DCE

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could result in a significant payment to Parties or a considerable reduction in their Imbalance Charge had there not been a DCE. The Settlement Adjustment Processes were designed to ensure the accurate calculation of Parties' Imbalance volumes, reflecting the actions they take (or had planned to take) voluntarily. This means that Trading Parties do not benefit or suffer from the effects of a DCE that are outside of their control.

The SAPs involve Metering System level estimates being aggregated to Balancing Mechanism (BM) Unit level and included in Trading Parties' Imbalance Volumes as though the DCE was the provision of a Balancing Service by the Trading Party.

Issue 89 'Ensuring Demand Control Event (DCE) procedures remain fit for purpose'

On 9 August 2019 a power cut occurred following the combined loss of several larger and smaller generators. The power cut was caused by several concurrent issues across multiple sites and left 1.1 million electricity customers without power for between 15 and 45 minutes. There was also major disruption to parts of the rail network, including blocked lines, cancellations, and significant delays impacting thousands of passengers.

Following the August 2019 DCE, SAPs were operated for the first time. The BSC Panel was concerned that the cost of running this process actually outweighed the benefit of adjusting Parties' Imbalance charges. The Panel raised [P397 'Assessing the costs and benefits of adjusting Parties' Imbalances following a demand disconnection'](#) to address this. After due consideration, Ofgem decided to Send Back the P397 Final Modification Report with a request for further evidence to be gathered. Additionally, Parties, Party Agents, and Central Systems encountered some difficulties during the first use of the SAPs.

[Issue 89](#) was raised on 23 March 2020 to review the first instance of the SAP being used to determine whether they are fit for purpose, and to finalise and issue a Request for Information (RFI) to industry to gather the data necessary to perform the analysis required by Ofgem for P397.

Members highlighted that during the SAP for DCE00201, industry participants found some documentation to be unclear or contradictory. For example, participants felt the meaning of and treatment of an 'affected Metering System Identifier (MSID)' was unclear in the BSCPs.

The Issue Report was presented to the Panel in June 2021, and the Panel agreed with the conclusions of the Issue Group. This included a conclusion that a CP should be raised to make the minor improvements required to clarify the CSDs.

This CP seeks to address the issues and inconsistencies within the CSDs highlighted in Issue 89. These must be resolved so that fewer problems are encountered in any future DCE events.

DCE Document Review Outcome

D0377 'Disconnection Purchase Matrix Data File' format issue

It was found that there were inconsistencies in the formatting of D0377 files. The SVA Data Catalogue does not match Supplier Volume Allocation Agent (SVAA) Technical Specifications, as Profile Class is included in the Data Catalogue but not in the Technical Specification. Elexon worked with its service provider to create a patch to correct this issue for DCE00201, once it was agreed that Profile Class was not required. To prevent these issues going forwards, the SVA Data Catalogues should be corrected by removing the Profile Class field from D0377.

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Affected Metering System Identifier (MSID)

It was found that there was no clear definition of an affected MSID within the CSDs, which caused some confusion as to which MSIDs should be included in the SAP. For example, where Metering Systems were not disconnected for the entire duration of DCE00201 it was unclear if these should be considered affected MSIDs. To clarify this it was deemed necessary to define an affected MSID in the relevant BSCPs.

An affected MSID is any MSID that an LDSO disconnects due to a DCE, and that the period of disconnection should match the length of the DCE as reported by NETSO, regardless of the actual period of disconnection. For example, even if an MSID was only disconnected for five minutes in a DCE that impacted six Settlement Periods, it should be treated as if it was disconnected for all six Settlement Periods.

P0238 flows

BSCP502 states that a P0238 flow received from a different Market Participant Identifier (MPID) but the same DCE ID will overwrite a previous P0238 with the same DCE ID. This is incorrect, and BSCP502 should state that P0238 flows received from different MPIDs but the same DCE ID will append otherwise disconnected MSIDs contained within the original P0238 will be lost. The correct wording can be found in BSCP504.

P0238 flows

There is wording in BSCP515 that implies resubmission of P0238 flows is part of the SAP, whereas BSC Modification P305 designed the process around a single correct submission of a P0238 file. The BSCP515 wording should be edited to state that only one P0238 submission from LDSOs is required, i.e. that there is no need to keep updating it. However, should there be an error in the original file, then LDSOs may create a new version which would need to be circulated.

Elexon Communication

During the DCE that occurred, there was no DCE contact list for Elexon, so it was not clear how best to contact dedicated staff/teams within the impacted Parties and Party Agents. Given that DCEs are a rare occurrence, maintaining an up-to-date contact list specifically for these cases may not be practical. During the Issue 89 discussions it was decided that, after receiving a DCE instruction, Elexon should contact all Category A Authorised Persons to establish points of contact within each Party and Party Agent. This would effectively generate a contact list specific to the DCE which could then be discarded following the completion of the SAPs. This requirement should be added into the relevant BSCPs.

Housekeeping

Some housekeeping issues were also identified in the BSCPs, such as mentions of Demand Side Balancing Reserve (DSBR), which should be removed, correcting cross-references, and correction of typos.

3. Solution

Proposed solution

This CP proposes amendments to the CSDs relevant to DCEs to ensure they are consistent and clear. The relevant CSDs are:

- [BSCP03 'Data Estimation and Substitution for Central Volume Allocation'](#);
- [BSCP502 'Half Hourly Data Collection for SVA Metering Systems Registered in SMRS'](#);
- [BSCP503 'Half Hourly Data Aggregation for SVA Metering Systems Registered in SMRS'](#);
- [BSCP504 'Non Half Hourly Data Collection for SVA Metering Systems Registered in SMRS'](#);
- [BSCP505 'Non Half Hourly Data Aggregation for SVA Metering Systems Registered in SMRS'](#);
- [BSCP508 'Supplier Volume Allocation Agent'](#); and
- [BSCP515 'Licensed Distribution'](#).

Following a review of the CSDs, the required changes identified are:

- Remove the Profile Class field from D0377 (note that this does not result in a change to the SVA Data Catalogue);
- Define affected MSID in the relevant BSCPs;
- Update BSCP502 to align with BSCP504 relating to P0238 flows received from different MSIDs but the same DCE ID;
- Update BSCP515 to state that only one P0238 submission is required from LDSOs. However, should there be an error in the original file, then LDSOs may create a new version which would need to be circulated;
- Update how Elexon will make contact with Parties and Party Agents in the relevant BSCPs so that within 1WD of receiving a DCE Instruction, Elexon will send details of DCEs to all Category A Authorised Persons and establish points of contact for ensuring direct communications with those involved in SAP; and
- .Correction of housekeeping issues.

Proposer's rationale

This CP aims to implement the recommendations from Issue 89, as noted by the Panel. The CSDs related to the DCE SAP should be amended to ensure clarity and consistency. Any inconsistencies in the processes may lead to errors and/or delays within the data submission for the implementation of the SAPs, which could result in incorrect estimates being calculated for Trading Parties Imbalance volumes, and ultimately the Imbalance charges paid.

Proposed redlining

The CP proposes to update BSCP03, BSCP502, BSCP503, BSCP504, BSCP505, BSCP508, and BSCP515. The redlining to support this change can be found in Attachment B.

The CP proposes to update D0377. The redlining to support this change can be found in Attachment C.

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4. Impacts and Costs

BSC Party & Party Agent impacts and costs

As the proposed changes are clarifications of an existing process, rather than amendments, the impacts are expected to be minor. There will be a positive impact to BSC Parties and Party Agents due to the improved clarity and communication around SAPs, resulting in more efficient processes.

BSC Party & Party Agent Impacts

BSC Party/Party Agent	Impact
LDSOs	Improved clarity and communications around SAPs
NETSO	
Half Hourly Data Aggregators	
Half Hourly Data Collectors	
Non Half Hourly Data Aggregators	
Non Half Hourly Data Collectors	

Central impacts and costs

Central impacts

This CP will require changes to several CSDs, as listed below. No central system changes or impacts to BSC Agents are anticipated.

Central Impacts

Document Impacts	System Impacts
<ul style="list-style-type: none">• BSCP03 'Data Estimation and Substitution for Central Volume Allocation'• BSCP502 'Half Hourly Data Collection for SVA Metering Systems Registered in SMRS'• BSCP503 'Half Hourly Data Aggregation for SVA Metering Systems Registered in SMRS'• BSCP504 'Non Half Hourly Data Collection for SVA Metering Systems Registered in SMRS'• BSCP505 'Non Half Hourly Data Aggregation for SVA Metering Systems Registered in SMRS'• BSCP508 'Supplier Volume Allocation Agent'• BSCP515 'Licensed Distribution'	<ul style="list-style-type: none">• None

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Impact on BSC Settlement Risks

Impact on BSC Settlement Risks

Elexon anticipate no impact on Settlement Risks associated with this change. However, the improvements made could reduce risk to Settlement should a DCE occur.

Central costs

The central implementation costs for this CP will be less than £2,000 to implement the relevant document changes.

5. Implementation Approach

Recommended Implementation Date

The CP is proposed for implementation on 3 November 2022 as part of the standard November 2022 BSC Release, as this is the first available release. This CP should be implemented as soon as possible to ensure clarity and consistency if another DCE takes place.

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6. Proposed Progression

Progression timetable

The table below outlines the proposed progression plan for the CP:

Progression Timetable	
Event	Date
CP Progression Paper presented to ISG for information	1 March 2022
CP Progression Paper presented to SVG for information	1 March 2022
CP Consultation	7 March 2022 – 1 April 2022
CP Assessment Report presented to ISG for decision	3 May 2022
CP Assessment Report presented to SVG for decision	3 May 2022
Proposed Implementation Date	3 November 2022 (Nov 22 Release)

CP Consultation questions

We intend to ask the standard CP Consultation questions for this CP. We do not believe any additional questions need to be asked for this CP.

Standard CP Consultation Questions
Do you agree with the proposed solution?
Do you agree that the draft redlining delivers the proposed solution?
Will this CP impact your organisation?
Will your organisation incur any costs in implementing the CP?
Do you agree with the proposed implementation approach for the CP?

7. Recommendations

We invite the ISG and SVG to:

- **NOTE** the proposed progression timetable for the CP; and
- **PROVIDE** any comments or additional questions for inclusion in the CP Consultation.
- **NOTE** that this CP will be presented to:
 - the ISG on 1 March 2022; and
 - the SVG on 1 March 2022.

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Acronyms

Acronyms used in this document are listed in the table below.

Acronyms	
Acronym	Definition
ALFDD	Automatic Low Frequency Demand Disconnection
BSCP	Balancing and Settlement Code Procedure
BM	Balancing Mechanism
CP	Change Proposal
CPC	Change Proposal Circular
CSD	Code Subsidiary Document
DCE	Demand Control Event
DSBR	Demand Side Balancing Reserve
EBSCR	Electricity Balancing Significant Code Review
ISG	Imbalance Settlement Group
LDISO	Licensed Distribution System Operator
MPID	Market Participant Identifier
MSID	Metering System Identifier
NETSO	National Electricity Transmission System Operator (
SAP	Settlement Adjustment Processes
SVAA	Supplier Volume Allocation Agent
SVG	Supplier Volume Allocation Group

Market messages and data items

Market messages and data items referenced in this document are listed in the table below.

Data Flows and Data Items	
Number	Name
D0377	Disconnection Purchase Matrix Data File

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External links

A summary of all hyperlinks used in this document are listed in the table below.

All external documents and URL links listed are correct as of the date of this document.

External Links		
Page(s)	Description	URL
2, 3	Technical Report on the events of 9 August 2019, DCE00201	https://www.nationalgrideso.com/document/152346/download
2, 3, 4	Issue 89 'Ensuring Demand Control Event (DCE) procedures remain fit for purpose' webpage	https://www.elexon.co.uk/smg-issue/issue-89/
3	Grid Code Section OC6 'Demand Control'	https://www.nationalgrideso.com/document/33866/download
3	P305 'Electricity Balancing Significant Code Review Developments' webpage	https://www.elexon.co.uk/mod-proposal/p305/
3	Ofgem's Electricity Balancing Significant Code Review (EBSCR)	https://www.ofgem.gov.uk/electricity/wholesale-market/market-efficiency-review-and-reform/electricity-balancing-significant-code-review
4	P397 'Assessing the costs and benefits of adjusting Parties' Imbalances following a demand disconnection' webpage	https://www.elexon.co.uk/mod-proposal/p397/
6, 7	BSCP03 'Data Estimation and Substitution for Central Volume Allocation'	https://www.elexon.co.uk/csd/bscp03-data-estimation-and-substitution-for-central-volume-allocation/
6, 7	BSCP502 'Half Hourly Data Collection for SVA Metering Systems Registered in SMRS'	https://www.elexon.co.uk/csd/bscp502-half-hourly-data-collection-for-sva-metering-systems-registered-in-smrs/
6, 7	BSCP503 'Half Hourly Data Aggregation for SVA Metering Systems Registered in SMRS'	https://www.elexon.co.uk/csd/bscp503-half-hourly-data-aggregation-for-sva-metering-systems-registered-in-smrs/
6, 7	BSCP504 'Non Half Hourly Data Collection for SVA Metering Systems Registered in SMRS'	https://www.elexon.co.uk/csd/bscp504-non-half-hourly-data-collection-for-sva-metering-systems-registered-in-smrs/
6, 7	BSCP505 'Non Half Hourly Data Aggregation for SVA Metering Systems Registered in SMRS'	https://www.elexon.co.uk/csd/bscp505-non-half-hourly-data-aggregation-for-sva-metering-systems-registered-in-smrs/
6, 7	BSCP508 'Supplier Volume Allocation Agent'	https://www.elexon.co.uk/csd/bscp508-supplier-volume-allocation-agent/
6, 7	BSCP515 'Licensed Distribution'	https://www.elexon.co.uk/csd/bscp515-licensed-distribution/

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