

BSC Modification Proposal Form		At what stage is this document in the process?
<h1>P379</h1> <h2>Enabling consumers to buy and sell electricity from/to multiple providers through Meter Splitting</h2>		<div style="display: flex; flex-direction: column; gap: 5px;"> <div style="border: 1px solid green; border-radius: 5px; padding: 2px; display: inline-block; background-color: #008000; color: white;">01</div> Modification <div style="border: 1px solid blue; border-radius: 5px; padding: 2px; display: inline-block; background-color: #e6f2ff;">02</div> Workgroup Report <div style="border: 1px solid purple; border-radius: 5px; padding: 2px; display: inline-block; background-color: #f2e6ff;">03</div> Draft Modification Report <div style="border: 1px solid orange; border-radius: 5px; padding: 2px; display: inline-block; background-color: #fff2e6;">04</div> Final Modification Report </div>
<p>Purpose of Modification:</p> <p>This Modification will enable individual consumers to be supplied by multiple Trading Parties through a Balancing and Settlement Code (BSC) Settlement Meter at the Boundary Point. It will amend the market rules to support development of non-traditional business models and innovation, expanding upon the solution to be implemented by BSC Modification P344 'Project TERRE implementation into GB market arrangements'. It will achieve this through the creation of a new Party Agent role, the Customer Notification Agent (CNA), who would reconcile power flows through the Settlement Meter, enabling accurate allocation of volumes and costs, which in turn will allow Trading Parties to reflect these volumes in their bills and payments to consumers.</p> <p>This Modification is being proposed by New Anglia Energy, a recent BSC entrant who will be an Exempt Supplier, but the principle behind it has support from a range of BSC Trading Parties including OVO Energy and Cooperative Energy, and non-BSC parties, including Powervault and Verv.</p>		
	<p>The Proposer recommends that this Modification should:</p> <ul style="list-style-type: none"> be assessed by a Workgroup and submitted into the Assessment Procedure <p>This Modification will be presented by the Proposer to the BSC Panel on 10 January 2019. The Panel will consider the Proposer's recommendation and determine how best to progress the Modification.</p>	
	<p>High Impact (BSC and Central System impacts detailed in section six):</p> <ul style="list-style-type: none"> Balancing and Settlement Code Company (BSCCo) Licensed Suppliers Exempt Suppliers Virtual Lead Parties (VLPs) 	
	<p>Medium Impact (BSC and Central System impacts detailed in section six):</p> <ul style="list-style-type: none"> Distribution System Operators (DSOs) Generators Master Registration Agreement (MRA) Connection and Use of System (CUSC) (potential) Grid Code (potential) 	

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Timetable		
The Proposer recommends the following timetable:		
Initial consideration by Workgroup	Week Commencing (W/C) 25 February 2019	 Elliott.harper@elexon.co.uk
Further consideration by Workgroup	W/C 1 April 2019	 0207 380 4302
Further consideration by Workgroup	W/C 29 April 2019	Proposer: Nigel Cornwall – New Anglia Energy
Further consideration by Workgroup	W/C 10 June 2019	 n.cornwall@cornwall-insight.com
Assessment Procedure Consultation	1 July 2019 – 19 July 2019	 01603 604400
Workgroup consider Consultation responses	W/C 29 July 2019	Proposer's representative: Ken McRae
Workgroup Report presented to Panel	12 September 2019	 k.mcrae@cornwall-insight.com
Report Phase Consultation	16 September 2019 – 27 September 2019	 01603 604400
Draft Modification Report presented to Panel	10 October 2019	Other:
Final Modification Report submitted to Authority	16 October 2019	
Targeted BSC Release	April 2020 (subject to Assessment of Modification and associated delivery timescales through impact assessment)	
		Other: Emma Burns Cornwall Insight
		 e.burns@cornwall-insight.com
		 01603 604408

1 Summary

What is the Issue?

This Modification will address a significant barrier to competition in the market rules which currently prevent multiple Trading Parties competing for behind the Meter energy volumes measured at the same Settlement Meter at the BSC Boundary Meter Point. The existing arrangements act as a barrier to the development of local energy markets and supply innovation, and effectively mean there is a monopoly of one party – the default Supplier – over a consumer's energy volumes behind a Settlement Meter at any given time.

Elsewhere projects are commercially disaggregating customers' volumes, e.g. through community energy schemes. However, this is only possible on the basis of agreement between those parties and a single default Supplier, and these activities are not recognised in the BSC market rules, with only the default Supplier being visible to BSC Settlement. Changing the market rules will facilitate third party supply activities and enable more effective competition for consumers' volumes.

What is the Proposed Solution?

This Modification will allow customers to be supplied by multiple Trading Parties through BSC required Settlement Meters at the Boundary Meter Point. It will represent a key change to the market rules that will widen consumer choice and support the development of non-traditional business models and innovation.

The solution to this proposal requires the creation of a new Party Agent role, the CNA, who will reconcile power flows through the Settlement Meter, enabling accurate allocation of volumes and costs, which in turn will allow Trading Parties to reflect these volumes in their bills and payments to consumers.

The change will likely be of considerable interest to, among others:

- community energy schemes;
- providers of electric vehicle (EV) and other consumer appliances offering bundled electricity supply;
- peer-to-peer trading participants and other local market developers;
- battery storage developers (and other aggregators), both behind and in front of the meter; and
- existing Trading Parties.

It builds on the [P344 'Project TERRE implementation into GB market arrangements'](#) solution, but it is not intended at this stage to focus on asset level meters behind the Boundary Meter Point, which is the subject of separate Modification currently progressing through the Assessment Procedure: [P375 'Settlement of Secondary BM Units using metering behind the site Boundary Point'](#).

Systems changes developed for Modification P344 mean that the basic architecture for these changes is already in place, as the BSC systems will allow secondary meter-level data to be identified and aggregated within settlement for the first time. While this change would be a step further than the Project TERRE changes, much of the work has already been done and the new work is additive.

2 Governance

Justification for Proposed Progression

We do not propose that this Modification is progressed as a Self-Governance Modification.

This Modification is likely to have a material and beneficial effect on existing and future electricity consumers, competition in the supply of electricity, commercial activities connected with the supply of electricity, and matters relating to sustainable development, security of supply and the management of the market.

This Modification is not linked to an imminent issue or current issue that if not addressed may cause significant impacts on Trading Parties, Consumers or other stakeholders, the safety and security of the electricity or gas systems or cause any Party to be in breach of any relevant legal requirements. We therefore propose that this Modification is not subject to a request for Urgent treatment.

Nevertheless, given the importance of the work to deliver the joint BEIS/Ofgem Smart, Flexible Energy Plan, including reform of the Supplier Hub, we believe the solution should be developed and tested during 2019, with an initial desire to implement in early 2020 (if possible and subject to solution development and impact assessment).

Requested Next Steps

This Modification should be:

- assessed by a Workgroup and submitted into the Assessment Procedure; and
- the Assessment Report presented to the Panel no later than 12 September 2019, with a subsequent view to implementing the required changes (if approved) in April 2020.

3 Why Change?

What is the Issue?

The Modification will address a barrier to competition in the market rules which prevents multiple Trading Parties competing for volumes measured at the same Boundary Point Meter registered in BSC Settlement. The existing arrangements prevent the development of local energy markets, and limit competition for a consumer's electricity volumes at the boundary point (based on behind-the-meter actions or participation in community initiatives, for example) and therefore consumer choice.

While it is currently technically and commercially possible to disaggregate a consumer's volumes between different Trading Parties through the Supplier Volume Allocation (SVA) Shared Metering Arrangements, there are cost and competition barriers to this approach. This approach only applies to Settlement Meters that are Half Hourly (HH) capable and requires a degree of manual intervention between the respective Suppliers and the appointed Half Hourly Data Collector (HHDC). The procedure requires Suppliers to submit information regarding how they will share supply in advance (usually as fixed proportions) and to appoint the same Meter Operator Agent (MOA) and HHDC. The SVA Shared Metering arrangements were designed for use at large, non-domestic sites. They do not offer a viable solution in terms of facilitating multiple Suppliers (including peer-to-peer trading) or use in the domestic or

smaller commercial sectors. Furthermore, while they enable an ex ante allocation, they would not support adjustment in the light of real-time consumer response based on technological or commercial interventions. This gives the default Supplier who registers the Settlement Meter considerable market power, and this position in effect forecloses much of the potential market being opened up by demand-side and smart techniques. Changing the market rules will facilitate third party supply activities and support the development of meaningful local energy markets.

Ofgem is considering important and wide-ranging changes in this area, some of which would seek to introduce some of the same benefits as this Modification (e.g. work on reforming the Supplier Hub and introduction of market-wide HH Settlement), the implementation and benefits of which will be seen in the next few years but probably not before 2023. This Modification is not intended to substitute or displace these longer-term developments, but rather bring forward a change within the existing rules that would enable a number of the benefits of changing and opening up the supplier hub role in the shorter term. It is also expected to produce learnings that will assist in the development of the longer-term solutions.

Therefore, we anticipate that experience under this Modification if implemented will also be an important contribution to further work by Ofgem (and the Department for Business Energy and Industrial Strategy (BEIS)) in assisting further decentralisation of the electricity market.

4 Code Specific Matters

Technical Skillsets

The following expertise and knowledge should be sought for participation in the Workgroups to develop the solution to this Modification Proposal:

- SVA Process;
- Party Agent functions;
- Electricity Supplier functions; and
- New electricity supply business models (community energy, peer to peer trading, bundled products, storage sharing).

Reference Documents

ELEXON's white paper published on 16 April 2018 has been used as the basis for this Modification Proposal:

[ELEXON White Paper: Enabling customers to buy power from multiple providers](#)

5 Solution

Proposed Solution

This proposal would bring forward changes to the SVA arrangements to allow consumers to buy electricity from (or sell electricity to) multiple Trading Parties at the Boundary Point Meter. It would do this by splitting volumes through a single BSC Meter to different Trading Parties. This disaggregation and reallocation process allows the consumers to effectively have two (or more) relationships for their

energy volumes: one with a 'main' or 'default' Supplier (who would continue to be responsible for metering and data collection/data aggregation activities under the BSC); and others with other Trading Parties.

This change to the rules would be an important change that would allow decomposition of commercial aspects of the existing Supplier Hub facilitating competitive local energy markets for the first time and new service propositions. The technologies and case studies based around commercial pilot schemes already exist, but the activities are not recognised in the BSC rules, which limits competition. The rules therefore confer considerable market power on the Registrant of a Settlement Meter. Making this change to the market rules would open-up the market to innovators, increase choice and unlock the value of demand-side flexibility.

At a high level this solution would involve:

- an agreed method for measuring and assuring volumes of energy at participating sites and where relevant from in front of the Meter (e.g. sharing of output from grid-connected storage), and its reconciliation to Boundary Settlement Points registered by the default Supplier;
- a new BSC Party that would facilitate the flow of contract notifications and meter volume adjustments to facilitate Meter Splitting – the 'Customer Notification Agent (CNA)'; and
- changes to the SVAA and related data flows to support Settlement Meter data adjustments.

The role of the CNA

As noted above, the solution to this proposal requires the creation of a new Party Agent role, the CNA, who will reconcile power flows through the Settlement Meter, enabling accurate allocation of volumes and costs, which in turn will allow Trading Parties to reflect these volumes in their bills and payments to consumers. The CNA role would be to facilitate Meter Splitting, rather than to participate in energy trading itself, by acting as the intermediary for parties to submit data into BSC Settlement and providing performance assurance. Therefore, it would not need to be licensed, but users of the CNA service would need to be licensed Suppliers or subject to the relevant thresholds licence exempt.

The CNA role would be to:

- notify BSC Central Systems of the Metering Systems for the consumers, Generators and Suppliers involved in energy trades or reallocations under the relevant scheme;
- notify the associated energy volumes and ensure consistency with the existing contract notification regime¹, and
- notify adjustments to metered volumes to reflect volumes to be attributed to additional Suppliers.

The CNA will notify BSC Central Systems of energy trades/allocations as soon as they have been made, including the energy volume traded and the Metering System(s) involved in each trade. BSC Central Systems will then adjust the total aggregate energy volumes assigned to the two Parties subject to the trade/reallocation. As part of the adjustment process, and where appropriate, the traded volumes will be verified against the HHDA volumes for the relevant Metering Systems.

¹ Unlike an ECVNA they would need to be authorised by the third party licensed (or exempt) Supplier whose trades they are notifying, rather than by the default Supplier.

SVAA

The SVAA will additionally be required to make adjustments to the metered volumes of the default Supplier notified by the CNA and to notify the CNA and the Supplier of adjustments made.

Meter Point Administration Service

Local energy or peer-to-peer trades in respect of small-scale generation could require export Metering Systems to be registered for Settlement purposes in the Meter Point Administration Service (MPAS). This is not mandatory for licence-exempt generation and supply, but engaged consumers should at least have the option of registering volumes.

Wider Market Considerations

A unique feature of our proposed solution is that it can be implemented against the background of on-going changes taking place on the wider system, including the removal of Feed-in-Tariffs (FiTs) from the market from 31 March 2019 and workstreams to deliver (among other things) integration of storage batteries, faster switching and market-wide HH Settlement.

To recognise these on-going developments, we propose that for a domestic or smaller site to be eligible:

- the site owner would have to be offered a HH two-way Meter as a condition of entering the scheme;
- new profiles or a new allocation methodology could be required where the customer considers it infeasible or uneconomic to adopt a full smart metering solution at the boundary and at all measurement points behind the default meter. There is an important issue here as to how representative and extensive these assessments would need to be, especially where the site owner is still reliant on NHH consumption metering. This issue of whether coverage should be only to HH or also include NHH meters should be discussed by the Workgroup during the Assessment Procedure;
- thought will also be needed around how fixed charges associated with the Settlement Meter should be allocated to different Suppliers²;
- the scope for operation of the CNA will require consideration³; and
- there might need to be a new Code of Practice (CoP) to define suitably accredited Metering Systems considered appropriate for measurement behind the Settlement Meter.

The relevant Suppliers and the CNA will be notified of the adjustments. The purpose of notifying Suppliers of adjustments made to their energy volumes is to allow Settlement of default Meters to be made whole and to allow individual Trading Parties to adjust their bills to the consumer accordingly to share benefits.

² Volumetric charges would follow volumes, but fixed charges are more problematic, an issue that is likely to become more significant with a shift to higher levels of fixed network charges following implementation of the Targeted Charging Review.

³ We have assumed that any party would be able to seek qualification in this capacity (as can for instance contract notification agents), but we also envisage that competing CNAs will look to become EV or battery storage specialists, so an individual CNA would not need to be tied to a specific Settlement Meter. The Working Group will wish to consider this issue

We propose that the Suppliers registering default Meters would not be allowed to opt out their consumers from buying electricity from third parties, as this would be a barrier to competition.

Performance Assurance

Appropriate metering and performance assurance is a key consideration of this solution. Energy volumes will need to be measured using an appropriate measurement device, set out in a relevant CoP. Consideration will need to be given to the assurance of these and of the CNA, and to ELEXON's role in overseeing this. We note that new accession and assurance methods have been developed as part of the P344 'Project TERRE' changes, and these could be used as a starting point but, as noted above, we think a new CoP might be needed and should be discussed by a Workgroup.

Suppliers will need to be confident that adjustments submitted into BSC Settlement by CNAs have been calculated accurately. We believe this can be achieved by requiring CNAs to accede to the BSC possibly as a new type of Party Agent. This would be a 'lighter touch' BSC Party role, along the lines of a VLP (as adopted for P344). Their accession to the BSC would allow appropriate Performance Assurance Techniques (PATs) to be applied to their activities.

Workgroup Considerations

Issues that the Workgroup may wish to have particular regard to may include:

- inclusion of treatment of Non Half Hourly (NHH) Meters vs HH meters;
- treatment of exports at the Boundary Meter Point;
- methodology for allocating volumes, and the associate costs and benefits of different available approaches;
- treatment and allocation of fixed charges;
- the scope for more than one CNA operating behind a Settlement Meter;
- appropriate Performance Assurance Techniques;
- whether new profiles are required or would be beneficial for the solution;
- interaction with proposals for asset level metering (P376), including a potential new CoP;
- impacts on the MPAS registration system and any other external impacts; and
- treatment of disputes.

6 Impacts & Other Considerations

Party & Party Agent Impacts

This Modification will have a medium to high impact on:

- BSCCo;
- Suppliers (both Licensed and Exempt);
- VLPs (with their provisions implemented in February 2019 through ['P344 'Project TERRE'](#));
- Generators;
- DSOs;
- Parties that wish to participate in the CNA role; and
- other agents notifying volumes.

This change will likely to be of considerable interest to, among others:

- community energy schemes;
- providers of electric vehicle (EV) and other consumer appliances offering bundled electricity;
- peer-to-peer trading participants and other local market developers;
- battery storage developers (and other aggregators), both behind and in front of the meter; and
- existing Trading Parties.

Cross-code Impacts

The following cross-Code impacts may arise from the solution to this Modification Proposal:

- the solution may impinge on the Meter Point Administration Service (MPAS) and so there may need to be consequential changes to the MRA;
- the solution may require amendments to the MRA Data Transfer Network (DTN);
- depending on the solution developed during the Assessment Procedure, changes may be required to the Connection and Use of System code (CUSC); and
- depending on the solution developed during the Assessment Procedure, changes may be required to the Grid Code.
- there may be implications for network charging, impacting on the CUSC and Distribution Connection and Use of System Agreement (DCUSA)

BSC Documentation Impacts

The solution would likely require changes to the following BSC Sections, which will be confirmed during the Assessment Procedure solution development:

- A, Parties and Participation
- D, BSC Cost Recovery and Participation Charges
- E, BSC Agents
- H, General
- J, Party Agents and Qualification Under the Code
- K, Classification and Registration of Metering Systems and BM Units
- L, Metering
- O, Communications Under the Code
- Q, Balancing Mechanism Activities
- S, Supplier Volume Allocation
- S Annex S-1, Performance Levels and Supplier Charges
- S Annex S-2, Supplier Volume Allocation Rules
- T, Settlement and Trading Charges
- U, Provisions Relating to Settlement
- V, Reporting
- W, Trading Disputes
- X, Definitions and Interpretation,
- X Annex X-1, General Glossary,
- X Annex X-2, Technical Glossary, and
- Z, Performance Assurance.

In addition, the solution would likely introduce new Balancing and Settlement Code Procedures (BSCPs) and Service Level Agreements (SLAs) governing the role of the CNA.

BSC Central System Impacts

It is anticipated that this Modification Proposal may impact the following BSC Central Systems, which will be confirmed during the Assessment Procedure through impact assessment:

- Balancing Mechanism Reporting Service (BMRS);
- Central Registration Agent (CRA);
- ELEXON Portal;
- Estimated Annual Consumption (EAC)/Annualised Advance (AA) (potential);
- Funds Administration Agent (FAA);
- Performance Assurance Reporting and Monitoring System (PARMS);
- Settlement Administration Agent (SAA);
- Supplier Volume Allocation Agent (SVAA); and
- Technical Assurance Agent Monitoring Tool.

Does this Modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

In our (Proposer's) view, this Modification does not impact any ongoing SCR.

This Modification interacts with [P344 'Project TERRE implementation into the GB market arrangements'](#) (to be implemented in February 2019), [P375 'Settlement of Secondary BM Units using metering behind the site Boundary Point'](#) (currently under assessment), [P376 'Utilising a Baselining Methodology to Set Physical Notifications for Settlement of Applicable Balancing Services'](#) (currently under assessment) and also with Ofgem's reform of the future retail markets, including the Supplier Hub principle.

Interactions with these ongoing workstreams should be considered through the assessment of the solution of this Modification Proposal.

Consumer Impacts

The Modification should enable new electricity products for consumers, enabling greater choice and better service. The Modification should also enable greater competition between Suppliers for their consumers, improving value for these consumers.

In summary it:

- allows earlier roll-out of dynamic tariffs and capture of value from changes in consumer behaviour, and for those benefits to be shared with the consumer;
- supports innovation and consumer choice through greater competition for new services; and
- provides opportunity of enhanced revenue streams to compensate for loss of FiTs to new micro-generation sites.

Environmental Impacts

This Modification would have the following positive environmental impacts:

- supports continued deployment of low-carbon generation and battery storage behind the Boundary Point Meter;
- creates opportunities for new flexibility services and their aggregation for the benefit of Suppliers and distributors, and
- increased Distribution System resilience, enabling more installation of renewable generation at distribution level.

7 Relevant Objectives

Impact of the Modification on the Relevant Objectives:	
Relevant Objective	Identified impact
a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence	Neutral
(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System	Positive
(c) Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity	Positive
(d) Promoting efficiency in the implementation of the balancing and settlement arrangements	Neutral
(e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]	Positive
(f) Implementing and administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation	Neutral
(g) Compliance with the Transmission Losses Principle	Neutral

This Modification will better facilitate Applicable BSC objective (b) as it will make possible benefits to system management at the local level and thus enable better judgements on residual balancing by the Electricity System Operator (ESO). This Modification, in conjunction with the introduction of VLPs, will also create the potential for greater participation in the Balancing Mechanism (BM), thus supporting system operation by providing the ESO with a greater range of options for economic and efficient system balancing. By creating greater efficiency at local level and through the interaction with system operation, this Modification is consistent with Ofgem's initiatives to achieve more efficient whole system outcomes.

The Modification would better facilitate applicable BSC Objective (c) as it will remove barriers to competition in the energy markets. The current de facto single ownership of the Meter volumes prevents competition being facilitated behind the Meter and greatly limits the development of innovation that could ultimately benefit consumers. Removing this barrier would better facilitate competition between Suppliers and other providers operating in the market, including in the provision of new services facilitated by this Modification.

This Modification better facilitates Applicable BSC Objective (e) as the Regulation strongly supports consumer choice and demand-side integration, both of which are key drivers of this Modification.

8 Implementation Approach

Whilst we request that the solution to this Modification Proposal be implemented at the earliest opportunity, requested by April 2020, the final implementation approach will depend on the solution to be determined by Workgroup.

This solution will then be impact assessed across the BSCCo service providers and market participants to determine the Implementation Date that will be presented to the BSC Panel for its initial recommendations as part of the Assessment Report in September 2019.

9 Legal Text

We propose that the legal text to deliver the solution to this Modification Proposal be developed during the Assessment Procedure.

10 Recommendations

Proposer's Recommendation to the BSC Panel

The BSC Panel is invited to:

- Agree that P379 be sent into the Assessment Procedure for assessment by a Workgroup.