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Report of industry review of Configurable Item changes to deliver the P344 solution

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ELEXON

REPORT OF INDUSTRY REVIEW OF CONFIGURABLE ITEM CHANGES TO DELIVER THE P344 SOLUTION

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OVERVIEW AND SUMMARY

This paper invites the Panel to approve the 30 Configurable Items (CI) changes needed to implement first phase of P344 'Project TERRE' as part of the February 2018 Release. P344 CIs required for go-live will be developed and consulted on next year ahead of go-live.

Given the extent of the CI changes required to deliver P344, the importance of P344 to market participants, and the P344 constrained timelines we adapted our normal approach to the development and approval of changes:

- Ordinarily, these amendments would be approved by the relevant Panel Committees. However, for efficiency, the Panel shall, via an ad-hoc Panel meeting, decide whether to approve these changes on 28 November 2018;
- Typically, CIs developed for Modifications during the implementation phase are drafted by ELEXON. However, we have developed these changes in collaboration with interested parties via Industry Workgroups (IWGs), as well as the normal consultation process; and
- This document has been drafted to more closely align to Modification Reports, rather than a Panel Committee paper, to provide detail on the changes being made and the IWG discussions and decisions.

BACKGROUND

Project TERRE is a balancing product implementation project, developed by a group of European Transmission System Operators (TSOs) (including National Grid) to fulfil European Balancing Guidelines (EB GLs) requirements on TSOs. Participating TSOs are required to implement, and make operational, a European platform for the exchange of Replacement Reserve (RR). The despatch of RR across TSOs will be harmonised by TERRE.

TERRE will be used for Balancing similar to how current localised products such as Bid-Offers submissions are used. National Grid has directed that the TERRE product should feed into the Balancing and Settlement Code (BSC) calculations of imbalance prices and volumes as soon as it is used for GB balancing. This requires changes to the GB market arrangements, including the BSC. P344 was raised by National Grid on 1 June 2016 to implement TERRE changes to the BSC and was approved by the Authority on 24 August 2018 for implementation on 28 February 2019. However, the TERRE product and platform will not be used until Q4 2019 at the earliest.

Development of new processes

It is necessary to amend or create several BSC Code Subsidiary Document (CSDs) and CIs to capture the numerous new BSC processes required to deliver the P344 solution. The new processes, which will be delivered on 28 February 2019, can be grouped into three areas covering P344 Business Requirements 1-7[1]:

- Registration of Virtual Lead Parties and Secondary Balancing Mechanism Units - includes Qualification and BSC Charges;
- Establishment of the SVA Metering System Balancing Services Register; and
- Provision of MSID HH Metered Data.

[1] See P344 Final Modification Report attachment C for more detail, which can be found on the P344 webpage

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We engaged with industry and held separate IWG meetings for each area whilst developing the new processes. At each meeting we presented how we proposed to create new processes and how these would be reflected in CIs (including the creation of a new BSC Procedure (BSCP). Industry was requested to review changes to CIs, and their feedback has been incorporated into the proposed changes to CIs. Processes introduced to deliver the P344 solution are described in detail in Appendix two.

Conflicts between changes

We identified potential overlap between P344 CIs and P369 'National Grid Legal Separation changes to BSC' CIs identified instances of 'System Operator' or 'Transmission Company' in P344 CIs, which are the phrases being changed by P369. There were two instances where the P344 redlining introduced one of these terms:

- BSCP15, para 3.22.4 footnote 40 – changed 'Transmission Company' to 'NETSO'; and
- CRA URS para 5.1 – changed 'System Operator' to 'NETSO'

Creation of a new Party type and BM Unit type

To deliver the P344 solution it has been necessary to create a new type of Party and a new type of Balancing Mechanism (BM) Unit[2]. The processes created/amended in CIs will refer to these throughout.

Virtual Lead Party

P344 requires the BSC to facilitate demand response participation in TERRE, including independent aggregation[3] facilities and energy storage. P344 interpreted this as requiring BSC changes to facilitate independent aggregators' participation in TERRE outside existing arrangements. P344 will allow such participants to be recognised as a distinct new type of BSC Party – Virtual Lead Parties (VLPs).

VLPs will not be subject to the same level of charges and obligations as existing BSC Parties as they will only participate in Settlement by offering balancing energy in TERRE and/or the Balancing Market. If they wish to participate in other aspects of the BSC (e.g. trading in wholesale markets) they will have to Qualify under an existing role and would be liable for all relevant BSC obligations and charges.

Secondary BM Units

GB Balancing Service Providers (BSPs) wishing to participate in TERRE will be required to register a BM Unit containing the assets (generation or demand side response) that will be used to deliver RR. Suppliers will be able to participate using their Additional BM Units[4]. Generators will be able to use Central Volume Allocation (CVA) BM Units, and VLPs will be able to use a new type of BM Unit – a Secondary BM Unit (SBMU).

SBMUs will be allowed to participate in both TERRE and the Balancing Market simultaneously, but participation in either or both markets remains optional. Payments to or from GB BSPs for RR will be treated as Trading Charges under the BSC, with similar payment terms to existing Trading Charges.

[2] BM Units are used in the BSC to account for all energy that flows on or off the Total System, which is the Transmission System and the Distribution System combined.
[3] Ofgem defines independent aggregators as parties who bundle changes in consumer's loads or distributed generation output for sale in organised markets and who do not simultaneously supply the customer with energy
[4] Suppliers are allocated one BM Unit per GSP Group when they register. Any other BM Unit for a given GSP group, is an Additional BM Unit

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IMPACT AND IMPLEMENTATION

Impact

CI changes required to deliver the P344 solution are expected to impact:

- BSC Parties;
- Virtual Lead Parties;
- Half Hourly Data Aggregators (HHDAs);
- Central Registration Agent (CRA);
- Funds Administration Agent (FAA);
- Settlement Administration Agent (SAA);
- Supplier Volume Allocation Agent (SVAA); and
- ELEXON

Implementation

The P344 solution is being implemented in two phases. Phase one is to allow GB market participants to complete TERRE pre go-live tasks, such as registration, to participate in TERRE from phase one (including testing).

Phase One

P344 CIs covered by this paper will be implemented on 28 February 2019 as part of the February 2019 BSC Release as part of the February 2019 BSC Release. Phase one will provide Parties with the ability to perform registration processes ahead of implementation this will provide access to Facilitating Aggregators ahead of go live.

Phase Two

While all P344 legal text will be implemented in the February 2019 Release, only legal text applicable in phase one will be active; the remaining BSC obligations will become active with TERRE go-live in Q4 2019 (TERRE go-live date will be determined by Ofgem and the ESO). All other P344 CIs will become effective on the go-live date (which may not necessarily tie in with a scheduled BSC release date) and are outside the scope of this paper. Phase Two will concentrate on the Replacement Reserve product itself focusing on the following processes;

- TSO Interface
- RR Activation Settlement
- RR Instruction Settlement
- BOA Settlement
- Non-Delivery
- Imbalance Settlement
- Reporting

- Currency Conversion
- Credit

Impact on Configurable Items	
CI	Impact
BSCP15	Changes to the Code Subsidiary Documents listed to the left will take place in the February 2019 release following Panel approval.
BSCP20	
BSCP25	
BSCP31	
BSCP38	
BSCP65	
BSCP68	
BSCP70	
BSCP71	
BSCP75	
BSCP503	
BSCP507	
BSCP508	
BSCP537	
BSCP537 Appendix 1	
BSCP537 Appendix 2	
BSCP537 Appendix 3	
BSCP602	
Communication Requirements	
Demand Capacity, Generation Capacity	
NETA IDD Part 1	
NETA IDD Part 2	
CRA URS	

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INDUSTRY WORKGROUPS

We held three meetings with industry members of proposed new processes and to gather feedback to refine the changes as required. The main points of discussion from each of the meetings are laid out below.

Registration of VLPS and SBMUs

Virtual Lead Party Registration Process

There were no points raised following the presentation by ELEXON.

ELEXON asked about the Market Exit process and it was agreed that the Market Exit process for VLPs should follow the same process as other Parties and last for 14 months until all liabilities have expired.

ELEXON asked about the duration of the VLP Market Entry process and the Workgroup offered no thoughts about the length of the entry process and were happy that it should align with the existing Market Entry timelines.

Secondary BM Unit registration process

There shall be a process for changing the FPN flag form 'Y' to 'N'. There should be no reason for a SBMU to be flagged as 'N' but it shall be allowed as circumstances may change at some point in the future.

It was noted that this had already been discussed by the Issue 71 'Introduction of a baselining methodology as an alternative to Physical Notifications' Workgroup, which may lead to a change. However,

it was agreed that the P344 processes should deal with the 'here and now' rather than what may be in the future.

It was discussed that SBMUs will be 'held' in the CRA whereas Primary BM Units are 'held' in MDD. It was explained that the MDD is essentially a database of reference data which is then shared with various BSC Systems however, as there is no need for SBMUs to be captured in MDD, the distribution of required data can be done by the CRA.

Additionally, it was agreed that:

- SBMU registration timescales should align with Additional Supplier Primary BM Units;
- BSCPs should be explicit about whether Primary BM Units or SBMUs are being referred to; and
- There shall be a process to amend the SBMUs' 'P/C' flag similar to License Exempt Export BM Units.

Base VLP Monthly Charge

ELEXON's proposal that the Base VLP Charge of £125/month (half of the Base Monthly charge for BSC Parties was agreed. This is based on guidance from the P344 Modification Workgroup that as VLPs will not have the full range of access that BSC Parties have, they should not pay as much. It ties in with the principal that P344 arrangements should encourage participation as much as possible and not be seen as a hindrance.

SBMU Monthly Charge

ELEXON proposed that as the SBMU process shall align with the Additional BM Unit process as much as possible, the SBMU Monthly Charge should align too and be £100/month[5] per registered SBMU.

It was pointed out that a Supplier can register and be assigned 14 BM Units, one for each GSP Group and they would cost £100 a month. However, for a VLP to register a SBMU in each GSP Group would cost £1,400 a month. It was felt that this was unfair on VLPs.

The workgroup discussed the following options:

1. The SBMU Monthly charge being approximately £7.14 a month (£100 divided by 14)
2. The SBMU Monthly Charge aligning with the Primary BM Unit Monthly Charge rather than the Additional BM Unit Monthly Charge

The first option was discounted on the grounds that if a VLP registered several SBMUs in one GSP Group then they would have an unfair advantage over Suppliers. For example, if a VLP registers five SBMUs in one GSP Group, the cost would be £35.70/month where as a Supplier would be charged £500/month.

The second option was favoured as it would give more parity between VLPs and Suppliers. This would mean that when a VLP completes the registration process they are assigned one SBMU per GSP Group. For every extra SBMU registered they would be charged £100. This would effectively create a new type of BM Unit – an 'Additional Secondary BM Unit' in effect. If the VLP chooses to only use the SBMUs registered in some GSP Groups then the other would be FPN flagged 'N' (see above) and the System Operator (SO) would not have visibility of them. The SO representative present did not see any initial concerns with this proposal.

MSID Pair Allocation

SVA Metering System Balancing Services Register

It was agreed that updates to the register on a daily basis will be unlikely and are expected to occur on a monthly or quarterly basis to align with customer contracts. However, it was noted that daily updates could occur in the future, depending on market developments.

We asked whether bulk updates vice one MSID at time would be beneficial but, attendees noted that it would be difficult to predict how many updates will be required until it is known how many VLPs will register.

The best communication methods for updating the register and the impacts they will have on Party's systems was discussed. ELEXON highlighted that the P344 Workgroup previously ruled out the Data Transfer Network (DTN) due to costs but, the Participation Management Platform (Salesforce), being implemented as part of ELEXON's foundation programme, could be used instead. ELEXON asked how the data would be formatted by industry, which was confirmed to be manual.

It was asked if data entered via the Participant Management Platform (Salesforce) would be reusable and highlighted that it is important that Parties do not have to repeat processes unnecessarily. For example, if MSIDs are already entered, it should be possible to access them via the front-end and amend the allocation without having to re-type the entire MSID. ELEXON noted this and will consider it as part of the platform solution.

[5] N.B. This section is a record of the discussion on the day. Following the meeting the Panel amended the amount to £60/month (see above).

MSID Pair Validation

It was agreed that an allocation rejection for any MSID Pair Notifications that fail validation would be useful for Parties and it will prevent calls to the BSC Helpdesk.

Retrospective MSID Pair Allocation

Retrospective MSID Pair allocations should be limited to Settlement Days prior to the R1 Settlement Run. We asked if there should be any further criteria limitations and discussed the merits of limiting retrospective amendments to existing and/or rejected allocations. It was agreed that adding this limitation would incentivise the submission of accurate data and mitigate the risk that VLP actions significantly impact later Settlement Runs.

Erroneous MSID Pair Allocation

It is not proposed to codify an erroneous MSID Pair allocation process. It was asked if there is anything in place to stop the losing VLP/Supplier from reregistering and overwriting the allocation. ELEXON advised that there is nothing to stop this occurring and it is the Lead Party's responsibility to investigate and resolve any anomalies.

Concerns were raised relating to how VLPs/Suppliers will validate loss notifications within the proposed allocation timescales. Appropriate timescales were discussed and it was requested that the initial MSID Pair Allocation Notification timescales be extended from D-1 to D-5. It was also agreed that a simplified erroneous process should be developed that is similar to the Master Registration Agreement (MRA) erroneous transfer process. This would include the necessary mediation steps between the two Parties with a timeline of when the actions need to be taken. It was noted that these obligations will need to be considered as part of the PAF.

Attendees questioned how MSID Pair Loss notifications will be communicated. It was suggested that the same communications method used for the notification of allocations be used, and it was noted that the erroneous process should cater for different communication methods.

HHDA Processes

MSIDs allocated to SBMUs will already be registered in Supplier BM Units. BSC Systems will need MSID delivered volumes for each Settlement Period for each MSID, to adjust Suppliers' incorrect imbalance positions caused by accepted TERRE or BM Bid/Offers against SBMUs. BSC Systems will need MSID HH metered volumes from HHDAs to calculate MSID delivered volumes from MSID Pair delivered volumes and ascertain if accepted bid volumes have been delivered or not. as such, there are new processes for HHDAs to submit MSID HH delivered volumes for specified MSIDs.

The only reason that data flows from the SVAA may be rejected by HHDAs is if there are issues with dates or other potential faults not relating to the actual MSID data. MSIDs for SBMUs etc. will already have been verified on more than one occasion so shouldn't be cause for rejection alone.

In the event of a Change of Agent event occurring between Settlement Runs for a Settlement Date the process will be similar to that for MSIDs within Supplier BM Units i.e. the HHDA for a Settlement Day is responsible for all Settlement Periods for that Settlement Day. If the SVAA requests information from a HHDA and the HHDA has changed, the SVAA shall interrogate the Electricity Central Online Enquiry Service (ECOES) and proceed accordingly.

APIs will be developed in due course to enable ECOES checking to become automated but at the present there is no timeline for development. The details of the data flows that will be used have been published on the MRA Service Company (MRASCo) website.

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INDUSTRY REVIEW

CIs were issued for industry review in two batches. The first Batch was issued on 18 October 2018 and contained new procedures, so required more time for Parties to review. The second batch was issued on 2 November 2018 due to the documents having less material impact on Parties. Both batches had a closing date of 14 November 2018. Three responses were received.

All responses agreed with the content in the main. To assist Parties with understanding the impacts, we will ensure the points raised by respondents are made clear in the Guidance we intend to publish ahead of implementation.

Two respondents provided their thoughts about BSC charges relating to VLPs and particularly SBMUs. We have passed these onto the BSC Charges review team (see Appendix 2 for further details) as they do not require changes to CIs. The consolidated responses are at Attachment A.

More detail around the MSID Delivered Volume algorithm and how it will accurately allocate MSID Pair Delivered Volumes within the MSID Pair to create the MS Delivered Volume was requested. In response, the MSID Pair Delivered Volume allocation process is documented in the approved P344 legal text to BSC Section S-2 paragraph 3.10 and a high level view can also be found in P344 business requirement seven.

Further clarification was requested around how components can be allocated and moved by VLPs, particularly:

- How often can VLPs move components between different BMUs;
- If different components can be allocated to SBMUs and non-BM ancillary services at different times; and
- How quickly components can be moved from SBMUs to non-BM ancillary services?

For clarification, MSID Pair Allocation processes are documented in the proposed new BSCP, BSCP602 'SVA Metering System Balancing Services Register Processes'.

A question was raised around how the 'SVA Metering System Balancing Services Register' will be kept in line with the register for HHDA appointments as the HHDA could be de-appointed over time so would not be responsible for submitting volumes to the SVAA. The answer to this is that, as the VLP has no knowledge of the HHDA for each Metering System in its SBMUs, it has no obligation to provide HHDA details - they will not be able to identify the HHDA as they have no commercial relationship. BSCP507 will provide details of how and when this data is to be procured and maintained.

Under each scenario the SVAA will trigger the MSID Standing Data set and reissue data flow D0354 'Metering System Reporting Notification' to the appropriate HHDA. This will ensure that the SVA Metering System Balancing Services Register holds the correct appointment details at all times and ensure Settlement is accurately calculated.

A question was raised around whether a Party is able to have either a Full Energy account or a Virtual Balancing account. The answer is that if the Party is solely registered as a VLP they will hold a Virtual Balancing Account. However, VLPs can opt to hold Energy Accounts by registering as a Trading Party.

Redlining

Other than suggestions to amend the redlining in relation to some of the above queries, none of the respondents suggested any other changes to the proposed Redlining. However, we have made changes to BSCP503 and the CRA URS (attachments L and X) to reflect proposed changes required as part of the P369. We have changed references to 'Transmission Company' and 'System Operator' to ''NETSO' to ensure consistency between the proposed changes.

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RECOMMENDATION

We invite the Panel to:

- **NOTE** the contents of this report;
- **APPROVE** the BSC Configurable Items listed in this paper with an effective date of 28 February 2019; and
- **NOTE** that the other P344 Configurable Item changes will be implemented as part of phase two.

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APPENDIX 1: REGISTRATION OF VIRTUAL LEAD PARTIES AND SECONDARY BM UNITS

Virtual Lead Parties

P344 Business Requirement one lays out the need for a VLP registration process:

- 'Independent Aggregators/customers shall be able to register as a BSC Party under a new 'Virtual Lead Party' participation capacity'.

Accession

The VLP registration process will be based on the BSC Party registration process. As with other BSC parties, VLPs will pay a flat monthly charge called a Base VLP Monthly Charge (see below). The VLP Monthly Charge will apply from the agreed accession date and will not be pro-rated.

Authorised Signatories

VLPs will need to create Authorised Signatories as per BSCP38 'Authorisations' in the same way as other BSC Parties

Communication lines

VLPs will be offered an optional low grade communication line, the cost of which is included in the BSC charges. However, as with BSC Parties, there will be additional costs for establishing high grade communication lines.

CVA Qualification

VLPs, like other BSC Parties, will be asked to demonstrate their ability to communicate with BSC Central Systems and comply with the requirements in BSC Section O 'Communications under the Code' by completing CVA Qualification Testing as part of the market entry process. This is optional, as Parties may choose to either opt-out or waiver the testing, at their own risk.

Lodge Credit Cover

VLPs, like other Parties, will be required to lodge Credit Cover for Trading Charges; but, due to the nature of their role, they will be exposed to fewer Trading Charges, which means they will have to put up less Credit Cover.

As with other BSC Parties, lodging Credit Cover as part of the market entry process will be optional for VLPs.

Credit Contacts

Before completing Market Entry, VLPs, like all new parties, will be required to provide ELEXON with two out-of-hours contacts in case an urgent issue arises e.g. Credit cover breaches etc.

The process for submitting an Operational Contact spreadsheet to Market Entry at least two working days (WD) prior to registering in Central Systems will be the same for VLPs.

Funds accession

The FAA manages the funds transfer between ELEXON and BSC Parties for any Trading Charges owed to or by BSC Parties during the Balancing and Settlement of the market. As with all BSC Parties, the FAA will require some company financial details from VLPs to ensure they are ready to be able to invoice for any non-delivery charges payable from go-live.

SVA Qualification

BSC Parties or Party Agents undergo a Qualification process to demonstrate the necessary systems and processes are in place to fulfil its obligations and to mitigate the risks of failure. BSCP537 'Appendix 1 Self Assessment Document (SAD)' contains the requirements for both Qualification and re-Qualification. Applicants are required to complete the SAD as per BSCP537 'Qualification process for SVA Parties, SVA Party Agents and CVA MOAs'.

The Qualification process will be updated to apply to new VLPs and will include:

- VLPs being exempt from re-Qualification[6];
- VLPs not be required to undergo witness testing, unless requested by ELEXON;
- VLPs not being registered in Market Domain Data (MDD[7]); and
- VLPs will not be required to provide an annual statement.

The SAD will include a new section (section 19) for VLPs to communicate how they will identify and mitigate risks to Settlement. The identified risk areas that will be included are:

- Submission of MSID Pairs;
- MSID Pair submission exception handling (processing/resolution);
- Registration loss process (VLP & Supplier);
- Submissions of Delivered Volume Failure and delay resolution; and
- Delivered Volumes exception handling (processing / resolution).

Registration of Party Role

VLPS will need to submit BSCP65 'Registration of Parties and Exit Procedures' form BSCP65/01 'Party Registration Application / Change of Registration Details Form' at least three WD prior to the Party registration date. The BSCP65/01 form will be amended to include VLPs.

VLP data flows

The P344 solution requires amending two existing data flows:

- SAA I014 - Settlement Report; and
- CRA I020 - Operations Registration Report.

[6] The re-Qualification process only applies to Party Agents if they deem they are making a Material Change to their systems as per BSCP537.
[7] MDD is data which relates to SVA to be provided by the SVAA to all persons involved in Settlement in accordance with BSCP509 'Changes to Market Domain Data'.

These are being developed as part of wider P344 work and, as such, were not within the scope of the release review but will be made available for industry consultation separately.

Secondary BM Units

P344 Business Requirement two describes the need for a SBMU registration process:

- 'BSC Parties with the 'Virtual Lead Party' Party participation capacity shall be able to register 'Secondary BM Units"

The SBMU registration process will be based on a simplified Additional BM Unit registration process. The main difference is that SBMUs won't be required to submit Generation Capacity (GC) and Demand Capacity (DC) and Market Domain Data. Additionally, ELEXON will not be required to submit Credit related data to the CRA.

Changes required

The P344 solution will:

- Create a process in for registering SBMUs to mirror that for Additional BM Units;
- Create a process for de-registering SBMUs to mirror that for Additional BM Units;
- Create registration and de-registration forms in BSCP15 'BM Unit Registration' for the registration of SBMUs;
- Require the CRA to inform the SVAA once a SBMU is registered;
- Require the CRA to provide relevant information to ELEXON for allocating a SBMU specific Monthly Charge (see below);
- Require ELEXON to provide a Transmission Loss Multiplier (TLMij) for new SBMUs based on the Grid Supply Point (GSP) Group ID of the SBMU;
- Make the registration and de-registration timescales the same as Additional BM Units;
- Allow SBMUs' Final Physical Notification (FPN) flags[8] to be changed from 'Y' to 'N'; and
- Create a process for amending the 'P/C' status,[9] similar to that for License Exempt Export BM Units.

Trading Units

SBMUs cannot be in a Trading Unit as the Metering System allocated to SBMUs are registered to another Supplier. The Supplier will have responsibility for managing the imbalance position in regards to Metered Volumes and not the VLP. Hence the Supplier will have Energy Accounts and not the VLP. This means that VLPs will not be subject to Energy Contract Volume Notifications (ECVNs) or Metered Volume Reallocation Notifications (MVRNs).

BSC Charges

P344 will introduce two new Main Specified Charges:

[8] There is no reason at this time why this may occur but, there is no reason for it not to occur in theory. Therefore, to avoid future CSDs changes, this process will be added in case it is required at a later date.
[9] Production or Consumption BM Unit – the BM Unit for the Production or Consumption Energy Account where a Party is a Trading Party.

- Base VLP Monthly Charge – proposed to be £125/month. This is half the amount for BSC Parties and reflects VLPs reduced interaction with the BSC; and
- SBMU Monthly Charge - The P344 Modification Workgroup envisaged that SBMU charges would be £60 per BM Unit to mirror the Additional BM Units i.e.

The proposed SBMU Monthly Charge means that if a VLP wishes to register one SBMU per GSP Group, they will be charged £840/month. A Supplier with only one BM Unit per GSP Group (i.e. no Additional BM Units) will be charged £60/month. It should be noted that VLPs, unlike Suppliers, will not be subject to Funding Shares.

Suppliers' Funding Shares are linked to their market share, meaning some will be charged less than £840/month and some will be charged more. i.e. if VLPs have to pay £840/month for a SBMU in each GSP Group they will be paying less than some Suppliers in total and more than others.

ELEXON, on behalf of the BSC Panel, is undertaking a review of BSC Charges. This will include a recommendation to the Panel on what the SBMU fee should be and will consider the above. BSC Charges are set solely at the discretion of the BSC Panel ahead of each Settlement Year, but may be varied during the Settlement Year. The BSC Panel will set the BSC Charges for VLPs and SBMUs ahead of P344 being implemented.

The two new charge types will increase the amount recovered by way of Specified Charges, therefore reducing the amount recovered by Funding Share[10]. P344 charges are estimated to recover £54,000/year based on 20 market participants.

[10] A collective term for Main Funding Shares, SVA (Consumption Funding Shares, SVA (Production) Funding Shares, General Funding Shares, Annual Funding Shares and (where applicable) Default Funding Shares. They each have the meaning given to them in BSC Section D1.2.1. They each reflect a Party's proportionate share of aggregate Credited Energy Volumes for a given month and therefore the proportion of certain BSC Charges for that month allocated to the Party in question.

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MSID PAIR ALLOCATION

An MSID Pair represents the SVA MS(s) at a single customer site that will provide Balancing Services. It must include an Import MSID and may include an Export MSID. This is because on sites with both an Import and Export MSID it is uncertain where the Balancing Service deviation will be realised.

Suppliers and VLPs (i.e. the Lead Party) shall be required to notify the SVAA which MSID Pairs should be treated as belonging to a SBMU for the purposes of providing TERRE or BM Balancing Services. This will allow Settlement to aggregate Metered Volumes accordingly and ascertain whether a Balancing Service has been delivered.

The SVAA shall maintain a register, the 'SVA Metering System Balancing Services Register', in which MSIDs (via MSID Pair Allocations) belonging to each BM Unit that offers BM or RR Services are recorded.

Parties will be able to add, amend or delete MSID Pair Allocations on the 'SVA Metering System Balancing Services Register' to rectify erroneous allocations and ensure Settlement data accuracy. There will however, be controls in place to ensure that this functionality is not used to facilitate a competitive advantage:

- Parties must give at least five Working Days' (WD) notice prior to adding a new MSID Pair Allocation i.e. the effective from Settlement Date (EFSD[11]) must be five WD in the future;
- Parties can only amend an MSID Pair Allocation for 35 WD after the EFSD. Parties can amend existing MSID Pair effective to Settlement Date (ETSD) at any time; and
- After 35 WD Parties can amend the MSID Pair EFTD to ensure future settlement is correct.

ELEXON's Foundation Programme is developing a self-service gateway to allow participants to make MSID Pair Allocation submissions. This will include manual online service functionality and automatic bulk uploads. Change Proposal (CP) 1510 'Allow the online management of registrations, Market Entry and Market Exit' has more detail.

MSID Pair Validation

ELEXON will validate any new or amended MSID Pair Allocation data prior to recording that data on the 'SVA Metering System Balancing Services Register'. This will be a three stage validation process.

1. Scheme validation – the SVAA will validate the MSID Pair Allocation data from Suppliers/VLPs
2. Business logic validation – the SVAA will validate the MSID Pair Allocation in accordance with BSC Section S 'Supplier Volume Allocation'
3. Reference data validation – the SVAA will validate MSID Pair Notifications to be allocated to SBMUs against reference data held by the relevant Supplier Meter Registration Service (SMRS)

MSID Pair Loss Notification

Once an MSID Pair Allocation has been validated it will be actioned and recorded on the 'SVA Metering System Balancing Services Register'. Settlement can't interrogate and validate commercial relationships, so will process all validated allocations therefore, if an MSID Pair is already allocated to a BM Unit, the most recent validated allocation will be actioned and the previous allocation end-dated.

[11] The date from which the lead Party will become responsible for the MSID Pair

Disputed MSID Pair Allocation

We recognise that errors may occur and erroneous MSID Pair Allocations may be submitted which are subsequently validated and actioned. A Disputed MSID Pair Allocation Process has been developed. This process sets a framework (including timescales) for Parties to raise and resolve such disputes. The process shall be raised within one WD of a rejection of MSID Pair allocation notification, with a response to be sent within eight WDs. The self-service gateway (see above) will include the functionality to raise a MSID Pair Allocation dispute.

Delivered Volumes

VLPs will be required to submit HH Delivered Volume data to the SVAA for MSID Pairs associated with SBMUs. The SVAA will use the Delivered Volume data and the Metered Volume data received from the HHDA to allocate the Delivered Volumes to individual MSIDs in SBMUs.

Our Foundation Programme is developing means for participants to use Application Program Interfaces (APIs) for MSID Pair Delivered Volume submissions; further details will be provided at a later date.

Delivered Volumes validation

The SVAA will validate the MSID Pair Delivered Volume data it receives prior to allocating them to the constitute MSIDs. This will be a two stage validation process:

1. Scheme validation – the SVAA will validate the MSID Pair Delivered Volume
2. Business logic validation – the SVAA will validate the MSID Pair Delivered Volume in accordance with BSC Section S

Delivered Volumes rejection and confirmation

If an MSID Pair Delivered Volume passes validation, a confirmation of acceptance of notification will be sent. However, if MSID Pair Delivered Volume fails validation, a confirmation of rejection of notification will be sent.

This will allow Parties to record the MSID Pair Delivered Volume confirmation and manage their portfolio effectively and, in the case of rejection, allow rectification action to be taken.

Delivered Volumes Exception Report

A new process is required to allocate MSID Pair Delivered Volumes between the MSID within the MSID Pair to create the MS Delivered Volume ($QVMD_{Kj}$). The MS Delivered Volume is used as the basis for adjustment applied at the Supplier BM Unit level to ensure the Supplier receives neither benefit nor penalty for the actions taken by a VLP.

If an MSID Pair Delivered Volume can't be fully allocated to the component MSIDs, the SVAA shall report an exception to ELEXON and the VLP. This will indicate that the MSID Delivered Volume is inconsistent with the Settlement metered data, suggesting that the MSID Delivered Volume has been reported incorrectly.

REPORT OF INDUSTRY REVIEW OF CONFIGURABLE ITEM CHANGES TO DELIVER THE P344 SOLUTION

HHDA PROCESSES

Processes need to be created so that HHDAs know for which MSIDs they need to send the SVAA the MSID HH Metered Volumes. Processes have been created to allow:

- HHDAs to pass information to the SVAA; and
- The SVAA to process data received from HHDAs; and
- The SVAA to pass information to the SAA

Requesting MSID data

The SVAA will be expected to identify the relevant HHDA for each MSID specified in a MSID Pair using the new register being created (see above). The SVAA shall then send a request the relevant HHDA to provide MSID data for specific time ranges and Settlement Periods.

If the request is accepted, in addition to the D0355, the HHDA will send a DXXXX 'Metering System Half Hourly Metered Data'[12] to the SVAA for each Settlement Period and each MSID for the specified date range.

These processes and data flows are based on those used for Electricity Market Reform (EMR) Settlement (EMRS). The EMRS data flows contain information almost identical to that required for P344 and using them will reduce the amount of change required as well as using processes and data flows already familiar to industry.

How will SVAA use the Metering System HH Metered Volumes?

The Lead Party for a SBMU will be responsible for submitting the total delivered volume per Settlement Period per MSID Pair (the MSID Pair Delivered Volumes) to the SVAA. The SVAA will be responsible for allocating MSID Pair Delivered Volume to one or both of the MSIDs in each MSID Pair using MS HH Metered Volumes from HHDAs.

If the VLP review identifies that the exception was caused by the MSID Pair Delivered Volume being incorrect, the VLP will submit a corrected MSID Delivered Volume to the SVAA.

Example of allocating MSID Pair Delivered Volume

If the MSID Pair Delivered Volume is -1.3 MWh, and the Import MSID has a HH metered consumption of 800 kWh, the volume allocated to the Import MSID will be -0.8 MWh.

The remaining -0.5 MWh of MSID Pair Delivered Volume will be allocated to the Export MSID (recognising that the MSID Pair Delivered Volume must have reduced the site Export).

Role of the SAA

Once the SAA has received information from the SVAA, they will use the SBMU Supplier Delivered Volume to adjust Suppliers' energy imbalance positions. They will also use the SBMU Demand Volume to ratify the VLP's delivery of Balancing Services volumes.

[12] DXXX is a new dataflow being created for P344 and the actual data flow number will not be allocated until shortly before DTC implementation. DXXXX is used as a placeholder until such time. It is based on D0357 'Half Hourly Metered Data for EMR'. It is due to be implemented in February 2019. MRASCo's DTC CP 3541 has more detail

Customer consent

HHDAs must not inform Suppliers which MS are used as part of SBMUs unless the customer has consented for the information to be shared. They may however, inform Suppliers how many MS are used for SBMU purposes. Further details about this can be found in the P344 Final Modification Report and the Authority's decision letter on the P344 Modification webpage.

HHDA Qualification

BSCP537 and its Appendixes will be updated to reflect the HHDAs will have in relation to VLPs and SBMUs[13].

Housekeeping Changes

The redlining for the CIs that require amending can be viewed in attachments B – X. In addition to the redlining required to deliver the P344 solution, we have also included housekeeping changes to several BSCPs:

- BSCP20 – changes to 4.2, 4.5 and 4.9 as these sections are no longer applicable
- BSCP31 – changes to reflect a change in definition in section 2.1
- BSCP68 – changes to section 4.8.1.2.1 to reflect a previous spelling error.
- We have also included housekeeping changes to BSCP507 and BSCP508.
- BSCP537 – changes to section 1.2 to add the Performance Assurance Party role missing from the acronym table and was not expanded in Section 1.2
- BSCP537 Appendix 3 – P344 does not make any change to BSCP537 Appendix 3 but we are taking the opportunity to implement a housekeeping change as BSCP537 Appendix 3 is related to changes proposed by P344
- The Communication Requirement Document – Section 4.6.1, to correct a manifest error, as the options previously shown no longer exist APPENDIX 2:

[13] New processes for HHDAs in relation to P344 are being introduced by IWG3.

REPORT OF INDUSTRY REVIEW OF CONFIGURABLE ITEM CHANGES TO DELIVER THE P344 SOLUTION

APPENDIX 2: WORKGROUP DETAILS

Industry workshop Attendance				
Name	Organisation	Registration processes (17 Jul 18)	MSID Pair Allocation (19 Jul 18)	HHDA processes (16 Aug 18)
Elliott Harper	ELEXON (Chair)		✓	✓
Chris Wood	ELEXON (Chair/Lead Analyst)	✓		✓
Sasha Townsend	ELEXON (Lead Analyst)		✓	
Adelle Wainwright	National Grid		☎	
Alastair Martin	Flexitricity	☎		
Bernie Dolan	National Grid	✓		
Christian Bach	Incommodities	☎		
Colin Prestwich	Smartest Energy		✓	☎
Eamonn Bell	Grid Beyond	✓	✓	
Graham Oakes	Upside Energy	☎		
Haydn Willis	SSE		✓	
Ian Hall	IMServ			✓
John Sherban	Quorom Development	✓		
Lee Stone	E.On	✓		
Meg Wong	Stark			☎
Nick Wood	Powervault	✓		
Nicola Ashdown	Siemens			✓
Nik Wills	Stark			☎
Oliver Zhe Xing	Orsted		✓	
Pam Liu	Intellicharge	✓	✓	✓
Paul Barnett	Manx Utilities	✓		
Paul Troughton	EnerNOC UK Ltd	✓		
Sam Botterill	Independent		✓	
Sebastian Blake	Open Energi	✓		
Tom Webb	UK Power Reserve	✓		

Industry workshop Attendance				
Name	Organisation	Registration processes (17 Jul 18)	MSID Pair Allocation (19 Jul 18)	HHDA processes (16 Aug 18)
Colin Berry	ELEXON (Design Authority)			✓
Matt Roper	ELEXON (Design Authority)	✓	✓	
Allan Toule	ELEXON (Subject Matter Expert)			✓
Darren Draper	ELEXON (Subject Matter Expert)	✓		
Ed Morris	ELEXON (Subject Matter Expert)	✓		
Jemma Williams	ELEXON (Subject Matter Expert)	✓		
Katie Wilkinson	ELEXON (Subject Matter Expert)	✓	☎	
Victoria Moxham	ELEXON (Subject Matter Expert)		✓	
Abidemi Akeredolu	ELEXON (Business Analyst)			☎

APPENDIX 3: GLOSSARY AND REFERENCES

Acronyms

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

Acronyms	
Acronym	Definition
API	Application Programming Interfaces
BM	Balancing Mechanism
BSC	Balancing and Settlement Code
BSCP	BSC Procedure
BSP	Balancing Service Provider
CRA	Central Registration Agent
CSD	Code Subsidiary Document
CVA	Central Volume Allocation
DC	Demand Capacity
DTC	Data Transfer Catalogue
DTN	Data Transfer Network
EB GL	European Balancing Guidelines
ECOES	Electricity Central Online Enquiry Service
ECVN	Electricity Contract Volume Notification
EFSD	Effective from Settlement Date
EMR	Electricity Market Reform
EMRS	Electricity Market Reform Settlement
FAA	Funds Administration Agent
FPN	Final Physical Notification
GB	Great Britain
GC	Generation Capacity
GCF	Group Correction Factor
GSP	Grid Supply Point
HHDA	Half Hourly Data Aggregator
IWG	Industry Workgroup
MDD	Market Domain Data
MOA	Meter Operator Agent
MPAN	Meter Point Administration Number

Acronyms	
Acronym	Definition
MRA	Master Registration Agreement
MRASCo	Master Registration Agreement Service Company
MS	Metering System
MSID	Metering System Identification
MVRN	Meter Volume Reallocation Notification
PAF	Performance Assurance Framework
RR	Replacement Reserve
SAA	Settlement Administration Agent
SAD	Self-Assessment Document
SBMU	Secondary BM Unit
SMRS	Supplier Meter Registration Service
SVAA	Supplier Volume Allocation Agent
TERRE	Trans-European Replacement Reserve Exchange
TLMij	Transmission Loss Multiplier per BM Unit (i) per Settlement Period (j)
TSO	Transmission System Operator
VLP	Virtual Lead Party
WD	Working Day

DTC data flows and data items

DTC data flows and data items referenced in this document are listed in the table below.

DTC Data Flows and Data Items	
Number	Name
DXXXX	Metering System Half Hourly Metered Data
D0354	EMR Reporting Notification
D0355	EMR Reporting Confirmation
D0356	EMR Reporting Rejection
D0357	Half Hourly Metered Data for EMR

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
3	Industry Workgroups webpage	https://www.elexon.co.uk/committees-meetings/working-groups/
3	P344 Project Terre webpage	https://www.elexon.co.uk/mod-proposal/p344/
5	BSCP38 'Authorisations'	https://www.elexon.co.uk/bsc-and-codes/bsc-related-documents/bscps/?show=all
5	BSC Section O 'Communications under the Code'	https://www.elexon.co.uk/bsc-and-codes/balancing-settlement-code/bsc-sections/
5	BSCP70 'CVA Qualification Testing for Parties and Party Agents'	https://www.elexon.co.uk/bsc-and-codes/bsc-related-documents/bscps/?show=all
6	BSCP301/04(a)	https://www.elexon.co.uk/bsc-and-codes/bsc-related-documents/bscps/?show=all
6	BSCP537 'Appendix 1 Self Assessment Document (SAD)	https://www.elexon.co.uk/bsc-and-codes/bsc-related-documents/bscps/?show=all
6	BSCP537 'Qualification process for SVA Parties, SVA Party Agents and CVA MOAs'	https://www.elexon.co.uk/wp-content/uploads/2017/10/BSCP537-v8.0.pdf
6	BSCP 509 'Changes to Market Domain Data'	https://www.elexon.co.uk/bsc-and-codes/bsc-related-documents/bscps/?show=all
7	BSCP65 'Registration of Parties and Exit Procedures'	https://www.elexon.co.uk/bsc-and-codes/bsc-related-documents/bscps/?show=all
8	Issue 70 webpage	https://www.elexon.co.uk/smg-issue/issue-70/
8	Issue 71 webpage	https://www.elexon.co.uk/smg-issue/issue-71/
10	Change Proposal (CP) 1510 webpage	https://www.elexon.co.uk/change-proposal/cp1510-allow-online-management-registrations-market-entry-market-exit/
10	BSC Section S 'Supplier Volume Allocation'	https://www.elexon.co.uk/bsc-and-codes/balancing-settlement-code/bsc-sections/
15	MRASCo Change Tracker	https://www.mrasco.com/changes/change-tracker/
19	Registration IWG webpage	https://www.elexon.co.uk/group/p344-iwg1-registration-processes/group-meetings/
19	Market Entry timelines	https://www.elexon.co.uk/reference/market-entry/
22	MRASCo website	https://public.huddle.com/a/xVowYzN/index.html