

ELEXON

BSC SANDBOX FINAL REPORT FOR CENTRICA

Final Report to the BSC
Panel of the BSC
derogation requested by
Centrica

Public

Contents

Contents	1
Introduction	2
Consultation responses	2
Key points of consultation responses	2
Elexon view on consultation responses	2
Views of the Performance Assurance Board	3
Sandbox Eligibility Criteria	4
The BSC Objectives	4
Risk to Settlement	5
Material impact on other BSC Parties	5
The minimum scope and timeline required	5
Similarity to existing derogations	5
Imminent BSC changes of interest	5
Provisions of the BSC to be derogated	5
Assessment of fees	6
Transition plan	6
Reporting plan	6
Recommendation	6

Introduction

This report fulfils BSCCo's obligation in BSC Sandbox Procedure 4.1.3 to provide the BSC Panel with an assessment of a BSC Sandbox Application. This report applies to BSC Sandbox Application 2021-01, by Centrica. The report also fulfils other requirements of BSCCo, including an assessment of fees, views on accession to the BSC, the summary of consultation responses and confirmation of a transition plan for ending the derogation.

Consultation responses

There were 4 responses to the consultation, from two Suppliers, NGESO and a third party organisation with relevant experience. In general the responses highlighted the need for appropriate controls and reporting on the trial, and the key points are set out below.

Key points of consultation responses

One of the consultations was submitted by a Performance Assurance Board (PAB) member, and many of the points of their response are reflected in the below section 'Views of the Performance Assurance Board'. The points below represent other issues raised in the consultation responses.

- At the end of the trial the following items should be included in the reporting for the derogation;
 - Number of instructions;
 - Value to NGESO;
 - Delivered vs expected results;
 - Learnings about controllability of assets;
 - Adaptations to dynamic parameters for the assets in question; and
 - Cost of the derogation.
- Sites taking part in the trial should be communicated, to improve the ability for Suppliers to identify sites with a Virtual Lead Party operating.
- The impact of shifting load to a more expensive tariff rate and of imbalance and network costs for the boundary Supplier should be reviewed after the trial.
- Restrictions on bid/offer acceptance should be reflected in the dynamic and technical parameters of the Balancing Mechanism Units (BMUs) participating in the trial.
 - This has been discussed with NGESO and is now resolved.
- There needs to be additional consideration of how 'unwinding' of bids/offers occurs on BMUs participating in the trial.
 - This has been discussed with NGESO and is now resolved.
- The operation of the trial may reduce the incentive to transfer from NHH to HH settlement.
- The substitution of boundary meter data for validation may introduce potentially unlimited settlement errors.

A number of other points were raised relating to the accuracy of the delivered volumes and the subsequent risk of incorrect values being submitted into settlement. As the actual consumption volumes are being measured in real time at the asset by Code of Practice 11 compliant measuring devices, we feel these points are inherently addressed by the application.

Elxon view on consultation responses

BSC Sandbox Final Report for Centrica

The consultation responses raise a number of valid points, and we recommend that the derogation takes them into account. In particular, we suggest that the reporting plan includes the points raised above. We also suggest that the derogation is conditional on agreement from NGENSO in respect of the dynamic and technical parameters submitted for the BMUs and unwinding Bid-Offer Acceptances.

We understand that the trial has protections to avoid shifting load from less expensive to more expensive tariffs, and suggest that Centrica keep this under review to avoid any inadvertent load shifting to more expensive tariff times. Ofgem may wish to consider whether any additional consumer protections may be necessary to grant the derogation.

We agree that this trial may reduce incentives for customers to transition from NHH to HH settlement. However, our understanding is that there are relatively few opportunities for the average domestic customer to influence whether their existing Supplier uses elective HH processes.

Views of the Performance Assurance Board

In addition to consulting on the application, we sought the views of the Performance Assurance Board (PAB) on Centrica's application. They were interested in the following areas, and we have summarised a response under each;

- Will the Delivered Volumes be accurate? Are they actual data (from non-Settlement asset metering), or just estimated?

The delivered volumes will be measured at asset level by Code of Practice (CoP) 11 compliant metering, as will be required by BSC Modification P375 once it is implemented. This means the delivered volumes will be based on accurate actual data from the assets, rather than being estimated.

- Given that storage heaters generally charge at night, will the VLP only be able to submit Offers during that time (when there will be less need for flexibility)? Or will they end up making Offers at other times when they can't actually deliver?

The proposed trial will involve the assets participating usually but not necessarily exclusively during the Economy 7 period, to maintain existing benefits to customers from the Economy 7 tariffs. Offers will only be submitted for assets that are consuming, which will normally be during the night. If this concept were to be expanded to other types of assets following a Modification then there would be a greater range of time for participation.

- Will these NHH customers be isolated in specific Secondary BM Units, or will they be in the same Secondary BM Unit as HH customers (in which case the risks to Settlement from the inaccurate HH metered data will be larger)

These NHH customers will be isolated in a specific Secondary BM Unit or Units. A process will be put in place to move customers that become HH from the Secondary BMU(s) to HH BMU(s), this will be done periodically.

- How will affected Suppliers know that they are affected?

Per the usual P344 process, affected Suppliers won't know in advance. They will receive BMU-level details of the adjustments made to them, but won't know these relate to the trial. Affected Suppliers may or may not receive MSID-level details of Delivered Volumes, depending on the consent flag.

The aggregated impact will be reported in the annual reporting to prove there is limited to no impact.

- Will the customers be in one GSP Group, or will they be spread across many?

The customers have not been identified ahead of the successful outcome of this derogation request. If there are customers in multiple GSP Groups, these will be placed in different Secondary BMUs.

- If the trial is approved, what information will be made available about how it went, and the learnings from it?

BSC Sandbox Final Report for Centrica

There will be annual reporting about the progression of the trial and the success or not of the operations. Of particular relevance to the BSC are learnings about whether there will any adverse impact on Suppliers and Balancing Services Use of System (BSUoS) charge calculations from the participation of these assets in the BM.

Sandbox Eligibility Criteria

The Sandbox Eligibility Criteria per the BSC Sandbox Procedure and our assessment of each are listed below;

- That granting the derogation does not pose undue risk to Settlement;

We have considered the risk to Settlement in the attached Risk Assessment, and do not consider there to be an undue risk to Settlement from the operation of this trial.

- That granting the derogation does not have material impact on other BSC Parties (other than by prior agreement e.g. a partnership or consortium);

We have considered the impact on other BSC Parties in the attached Impact Assessment. We believe there may be impact on other BSC Parties but that the Impact is hard to quantify because of the nature of profiled volumes, and is unlikely to be material on average. We believe this should be considered by the BSC Panel in their recommendation.

- That the derogation request has reasonably assessed the minimum scope and timeline required to effectively trial the project;

The derogation request has highlighted that the number of assets participating in the trial needs to exceed the lower limit for participation in the Balancing Mechanism. Because of the highly seasonal nature of the operational profile of the assets involved, Centrica have requested that the trial is in operation for 2 years to maximise the ability of the assets to provide value in the BM.

- That the derogation being requested is not materially similar to a derogation which is currently in force;

The derogation is unrelated to the derogation currently in force for Emergent Energy.

- That, while always considering applications against the current baseline, any imminent changes to the BSC would not make the derogation nugatory or inoperable; and

There are some relevant imminent changes to the BSC, characterised below, but they would not make the derogation nugatory or inoperable.

- Any other criteria that the Panel deem relevant to the Sandbox Application.

At the time of writing this report there are no other criteria that the Panel have deemed relevant to this application.

The BSC Objectives

We believe the Derogation will better facilitate BSC Objective (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.

BSC Sandbox Final Report for Centrica

We believe BSC Objective (c) is better facilitated because the trial aims to improve access to the BM for assets which are not located on HH settled sites. Increasing the range of assets able to generate and supply electricity is likely to improve competition in those markets.

Risk to Settlement

Our consideration of the risk to settlement is contained in the attached risk assessment. In summary, we do not believe there is any undue risk posed to settlement by the operation of the trial. We retain the ability to audit volumes submitted in respect of the assets participating in the trial, and in respect of the Boundary Point Metering Systems participating in the trial, and of Centrica's HHDA submissions throughout the duration of the trial.

Material impact on other BSC Parties

Our initial assessment determined that the impact on other BSC Parties is hard to characterise, as the effects were dependent on average deviation from profiles and should in theory average to zero across a large enough portfolio, resulting in the same impact as if the sites were settled Half-Hourly. More details can be found in the attached Impact Assessment document.

No other specific impacts were identified in the consultation responses.

The minimum scope and timeline required

Centrica have requested that the derogation apply to c.400 storage heaters, representing a load of c.1MW. It is important to note that this is the lower limit for size required to participate in the Balancing Mechanism, and therefore the trial cannot be any smaller than 1MW. Centrica have also requested that the derogation is in operation for 2 years, as the consumption of the assets is highly seasonal meaning there is a relatively narrow window of full operation in a given calendar year.

Similarity to existing derogations

There is no similarity to the currently active derogation for Emergent Energy.

Imminent BSC changes of interest

BSC Changes P375, P376 and P419 will affect VLP operation. However, none impact on the ability of a VLP to provide services to customers on NHH settled sites. We do not believe that the implementation of any of these Modifications would impact on the operation of this derogation if it were to be granted.

Provisions of the BSC to be derogated

The derogation is requested against the following sections in so far as required to achieve the objectives of the derogation:

- BSC Section K8.1.2(b) – to enable a Secondary BM Unit to comprise of Plant and Apparatus whose Imports and Exports are not measured by Half Hourly SVA Metering System(s). In particular, enabling a Secondary BM Unit to comprise of Plant and Apparatus whose Imports and Exports are measured by Non Half-Hourly SVA Metering System(s).
 - BSCP503 3.4.2.3B – to enable Centrica's HHDA to submit 0kWh volumes on receipt of a D0354 for the affected metering systems in place of the Metering System Half Hourly Volume required by the BSCP.
 - BSC Section S10.4.3 – to enable the SVAA to notify Centrica's HHDA instead of the relevant HHDA, which does not exist for the Metering Systems in the trial.
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Assessment of fees

Our service providers have not indicated that there will be any significant costs relating to the operation of this derogation, provided there are a low number of MPANs participating (fewer than 100 per submission, however multiple submissions may be possible). Therefore, we do not believe any fees should be paid in association with the granting of the derogation.

Transition plan

The assets will be participating in the BM via a remotely operated, cloud based system. In the event of the trial ending for whatever reason, the BM participation functionality will be turned off and the heaters will revert to their standard mode of operation. There will be no further impact on volumes at the sites once this occurs. The MSIDs would also be deregistered from the relevant Secondary BMU.

Reporting plan

Centrica would provide a report to Elexon annually on the progression of the trial.

We recommend that the report contains the following information;

- Number of instructions;
- Value to NGESO;
- Delivered vs expected results;
- Learnings about controllability of assets;
- Adaptations to dynamic parameters for the assets in question; and
- Cost of the derogation.

Recommendation

We invite the Panel to;

a) **Recommend** to Ofgem that this derogation is granted, subject to the following conditions;

- A restriction of the total number of participating MPANs (to be determined by the BSC Panel).
- Annual reporting of the information listed in the Reporting plan section of the Elexon Report for this derogation.