Draft Change Proposal – BSCP40/01	DCP No: 0047 *Version No: 1.0*

Title: Profiling and Settlement Review Group proposals

Description of Problem/Issue

ELEXON has established an expert group, the Profiling and Settlement Review Group (PSRG), to conduct a review of profiling and Settlement processes on behalf of the SVG. Two proposals by the PSRG are set out in this DCP to enable us to obtain an assessment of the impact the changes would have on industry participants. We will then consider how to progress these suggested changes and report back to the SVG. The PSRG's proposals are:

1. Twice Yearly Profile Production

The existing profile production process takes two years to process profile data and use it in Settlement. The length of the process limits the speed with which changes in market and customer behaviour (for instance, driven by industry changes such as Smart Metering or Feed in Tariffs) can be reflected.

The PSRG proposes to address this issue by producing profile data twice a year and reducing the length of the profile production process to one year. This would allow profiles to respond faster to changes in customer or market behaviour, enabling changes to be more quickly reflected in Settlement.

2. Cost-Reflective Application of GSP Group Correction

GSP Group Correction is the mechanism for allocating the errors in Metered Volumes in each GSP Group to Suppliers. Currently, errors are allocated only to Non Half Hourly (NHH) consumption. The rationale for this is that (currently at least) most of the total volume of errors is attributable to NHH profiling error, but this approach has two disadvantages:

- It represents a cross-subsidy of Half Hourly (HH) Suppliers by NHH Suppliers, in that HH MPANs are responsible for some of the errors, but all of them are allocated to NHH MPANs; and
- The effects of this cross-subsidy on NHH Suppliers will increase if introduction of Advanced and Smart Meters leads to a growth in HH settlement (and hence a reduction in the size of the NHH market). In this scenario the GSP Group Correction Factors applied to NHH Suppliers would become more volatile and extreme, even though the volume of errors in the market was reducing (due to the introduction of more accurate HH settlement).

The PSRG believes that the above issues can be addressed by amending the GSP Group Correction Scaling Factors in MDD to apply GSP Group Correction to each Consumption Component Class (CCC) in proportion to a best estimate of the volume of error per unit of consumption. This would:

- Remove the cross-subsidy between different classes of Supplier; and
- Ensure that any increase in the volume of energy settled HH does not lead to more volatile GSP Group Correction Factors.

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Justification for Change

1. Twice Yearly Profile Production

Reducing the length of the profile production process from two years to one year, and producing profile data twice a year, would allow profiles to respond faster to changes in customer or market behaviour, enabling changes to be more quickly reflected in Settlement.

Over 90% of half hourly energy readings for Profile Administrator (PrA) load research samples are now collected remotely and on a monthly basis. This facilitates the proposed change, which would not previously have been feasible. Additionally, new PrA Analysis software has decreased the amount of processing time required for profile production. As such this change would realise benefits of greater efficiencies in the profiling processes, which have not yet benefited the industry.

2. Cost-Reflective Application of GSP Group Correction

Updating GSP Group Correction Scaling Factors would:

- Remove a cross-subsidy of Suppliers in the HH market by Suppliers in the NHH market (thus facilitating effective competition in the supply of electricity); and
- Remove a potential barrier to the HH settlement of Smart and Advanced Meters.

The PSRG recognises that these identified benefits need to be considered against the impact on market participants. The purpose of this DCP is to gather impact assessment information from Suppliers, Supplier Agents and other market participants.

Proposed Solution(s)

1. Twice Yearly Profile Production

The profiles used in Settlement are currently updated on an annual timetable; a new set of profile deliverables are implemented in MDD prior to the start of each BSC Year. It is proposed that a twice yearly profile process be implemented, leading to two releases of profiling data each year, as follows:

		First Profile Production Process	**Second Profile Production Process**
1	Production, Review Approval Period	Start of Spring and extending through Summer and High Summer	Start of Autumn and extending through Winter
2	Data to be processed	Data for preceding seasons: Autumn and Winter	Data for preceding seasons: Spring, Summer and High Summer
3	Profile Data to be used in Settlement	The season following: Autumn and Winter	The season following: Spring, Summer and High Summer

The PrA Service is subject to re-procurement, which could result in the proposed profile production process being conducted either under a continuation of the current model (i.e. by an external agent as the PrA) or with ELEXON as the PrA (either producing profiles or managing an agent). However, the impact of ELEXON potentially assuming the PrA role is outside the scope of this DCP, which aims to identify only the impact of moving from the current profile production process to the proposed twice yearly profile production process under each of the various PrA scenarios.

There is no difference in the impact of the proposed change on industry participants whether ELEXON or an external agent (as PrA) which produces the profiles. The outcome will be the same, i.e. two releases of profiling data each year.
We believe there is a minor impact on BSCP508 (Supplier Volume Allocation Agent) which contains some references to regression coefficients being provided on an annual basis.

Further detail on the proposed process, a description of the existing profile production process and risks and benefits can be found in Attachment A (Shortening Profile Production Timescales).

BSC Agent impact assessment has confirmed that implementation of Twice Yearly Profile Production has no impact on any BSC Agents.

2. Cost-Reflective Application of GSP Group Correction

In order to apply GSP Group correction to additional CCCs, ELEXON would raise an MDD Change Request (in accordance with BSPC509, 'Changes to Market Domain Data') to update the GSP Group Correction Scaling Factors in MDD. This Change Request would introduce non-zero values for some or all of the Scaling Factors that are currently zero.

The new, non-zero values are not yet determined, but the PRSG's initial view (as described in Attachment B) is that the values set out in the following table would be appropriate.

	Scaling Factor	Justification
NHH consumption (CCCs 17, 18, 19, 32, 33)	Remain: 1.0	The value of each Scaling Factor relative to the others determines the correction applied (i.e. multiplying all Scaling Factors by a constant would have no impact. Leaving the Scaling Factor at 1.0 effectively uses these CCCs as a baseline against which to measure the level of error in other CCCs.
NHH line losses (CCCs 20, 21, 22, 34, 35)	Increase: 1.0 to 2.3	Reflects that a kWh of NHH losses is more likely to have been allocated to the wrong Settlement Period than a kWh of NHH consumption (due to approximations in the ex ante estimation of losses by LDSOs).
HH line losses (CCCs 3, 4, 5, 7, 8, 11, 12, 13, 15, 16, 25, 26, 30, 31)	Increase: 0.0 to 1.0	Reflects an estimate of the volume of HH line losses allocated to the wrong Settlement Period (due to approximations in the ex ante estimation of technical losses by LDSOs).
HH consumption (CCCs 1, 2, 6, 9, 10, 14, 23, 28)	Remain: 0.0	There is some misallocation of HH consumption (due to errors in metering, registration data and Supplier Agent processes), but the view of the PSRG (based on the BSC Audit and other sources) is that these are small compared to the misallocation of energy in other CCCs.

BSCP509 provides a simple mechanism for updating GSP Group Correction Scaling Factors, but these factors have never been changed before. We therefore believe there is a risk that market participants may have systems or processes that depend on the current values, and would therefore be impacted by any change. The PSRG will take into account any such impacts, and weigh up the costs and benefits before making a recommendation to SVG on this proposal.

Further details on the possible impacts of a change to GSP Group Correction Scaling Factors are as follows:

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a) Ongoing Process for Amending GSP Group Correction Scaling Factors:

The PSRG has set out an initial view on GSP Group Correction Scaling Factor values, as set out in the table above. However, these are not fixed. Note that:

- The Scaling Factor values may be amended prior to the initiation of cost-reflective GSP Group Correction; and
- Following initiation the SVG would continue to review the Scaling Factors periodically to ensure that they remain appropriate (i.e. correctly reflect the estimated average proportion of error in each CCC); this could potentially lead to further changes and differentiation of Scaling Factor values (e.g. different values for Unmetered Suppliers, or NHH-settled microgeneration).

b) Impact on Flows Issued by the Supplier Volume Allocation Agent (SVAA) to Suppliers:

Changing the GSP Group Correction Scaling Factors does not require changes to the structure of Supplier Reports, but will affect the data in those reports (for Settlement Dates on or after the effective date of the MDD Change Request). The changes will be as follows:

- Half Hourly Demand Report (D0081): the SPX and TOT records will show differences between Consumption and Corrected Consumption for CCCs which previously had not shown such differences; and
- GSP Group Consumption Total Report (D0276): the SPX record will show differences between Consumption and Corrected Consumption for CCCs which previously had not shown such differences.

c) Impact on Flows Issued by SVAA to the Transmission Company:

Changing the Scaling Factors will impact the Supplier-level data (i.e. SPX and TOT records) on the P0210 report issued to the Transmission Company (but not require change to the structure of this report), because these records report the following data:

- The Period Non-Corrected Supplier Deemed Take, i.e. the total energy across all CCCs that are not subject to GSP Group Correction; and
- The Period Corrected Supplier Deemed Take, i.e. the total energy across all CCCs that are subject to GSP Group Correction.

In contrast, the BM Unit-level data (i.e. the HHA record) does not make use of GSP Group Correction Scaling Factors to decide which CCC goes into which total, and will therefore be unaffected.

Changing the GSP Group Correction Scaling Factors will potentially diminish the usefulness of the data on the SPX records because line losses for Half Hourly customers will now be included in the same total as Non Half Hourly CCCs. However, Modification Proposal P260 (which proposes changes to the design of this report) would change only the BMU-level data in the HHA records, and not the Supplier-level data in the SPX records. This would seem to indicate that the Transmission Company may use the HHA data rather than the SPX data (in which case they would not be affected by changes to GSP Group Correction Scaling Factors). We welcome views from the Transmission Company on this.

d) Impact on Flows Issued by SVAA to Distributors:

The consumption data in the DUoS Report (D0030) is uncorrected, and will therefore be unaffected by changes to GSP Group Correction Factor Scaling Factors. The only impact on the D0030 is that the 'Domain Data'

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portion of the report (i.e. the CCC records) will show revised Scaling Factors. The structure of this report will be unaffected.

e) Impact on Supplier Agents:

We do not anticipate that Supplier Agents would be impacted by a change to GSP Group Correction Scaling Factors because they are providers of data into the GSP Group Correction process (rather than recipients of data from it).

f) Impact on BSC Agents:

BSC Agent impact assessment has confirmed that changing GSP Group Correction Scaling Factor values has no impact on any BSC Agents, including the SVAA (other than the impact of implementing an MDD Change Request, which is a normal part of the existing SVAA service).

Version History

This is v1.0 for impact assessment.

Has this DCP been raised for discussion by a Working Group: No

Both proposals in this DCP have arisen from the discussions of the PSRG.

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Attachments: Yes

- Attachment A: Shortening Profile Production Timescales (6 pages)
- Attachment B: Strawman Scaling Factors for GSP Group Correction (7 pages)