Draft Change Proposal – BSCP40/01	DCP No: 0001 *Version No:* ***1.0*** *(mandatory by BSCCo)*

Title *(mandatory by originator)* Changes to incorporate Central Management Systems in Unmetered Supplies arrangements

Description of Problem/Issue *(mandatory by originator)*

Various manufacturers have developed new technologies which allow certain forms of equipment categorised as Unmetered Supplies (UMS) in the BSC arrangements to be controlled in a more dynamic way. These technologies, known as Central Management Systems (CMS), provide customers with greater control over the operation of the supply, allowing both the equipment's switching times and power loads to be controlled down to each half hour period. This level of control offers the potential for customers to make significant energy savings, helping to meet increasingly tight regulations on energy consumption and carbon emissions.

However, in order for customers to realise the cost benefits of these reductions, the detailed usage information of the supply must be entered accurately in Settlement. UMS consumption is calculated using an Equivalent Meter (EM), which is a collection of hardware and software developed and approved for the purpose in accordance with BSCP520. Currently the UMS arrangements recognise two forms of Equivalent Meter:

- passive meters, which allocate unmetered consumption across half hourly periods based on a combination of annual burning hours and daily times of sunrise and sunset; and

- dynamic meters, which allocate unmetered consumption across half hourly periods by reference to a set of photoelectric cells, which provide the details on the switching times of the supply.

Both passive meters and dynamic meters make use of data registered centrally with ELEXON and made available for use on the BSC Website in the Unmetered Supplies Operational Information Document (Operational Information). In contrast, a CMS-based supply would make use of switching time and power load information provided directly by the management system, with this data being used to calculate the half hourly consumption values for submission into Settlement. This represents a new kind of Equivalent Meter, with different data input and operational requirements.

This Change Proposal has been developed on the basis of work carried out by a CMS Review Group, made up of external experts, established by the Supplier Volume allocation Group (SVG). The detailed discussions and recommendations of the group are detailed in paper SVG72/01 (and its attachments).

Justification for Change *(mandatory by originator)*

The ability to use CMS with Unmetered Supplies would be a great benefit to customers as it would enable them to realise the full cost benefit associated with reducing energy consumption. Use of CMS data would also increase the accuracy of Settlement as the data is more representative of the actual usage of the supply.

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Proposed Solution(s) ***(****mandatory by originator)*

Changes are required to BSCP520 'Unmetered Supplies', PSL170 'Meter Administration' and the SVA Data Catalogue to formally recognise the incorporation of CMS data into the UMS arrangements. There are a number of aspects to the solution; detailed proposals are included in Attachment A but are summarised below.

Equivalent Meter Specification

BSCP520 section 4.5 consists of an Equivalent Meter Specification, which sets out the hardware and software requirements for the current forms of Equivalent Meter, i.e. passive and dynamic. This section would be expanded to include the requirements for a centrally-managed EM, and would be sufficiently generic to cover a variety of CMS solutions developed by different manufacturers. The requirements established by this specification would include:

- CMS data storage;
- provision of data to the Meter Administrator (MA) and Unmetered Supplies Operator (UMSO);
- data validation and exception handling by the Meter Administrator;
- application of default data by the Meter Administrator; and
- provision of data to the Half Hourly Data Collector (HHDC).

A number of options exist for the format in which data may be passed between the CMS and MA; these are set out in the attachment and participants are invited to comment on the preferred approach. Two possible scenarios are envisaged; the MA may interface with the customer (who runs the CMS), or the customer may fulfil the MA role as well as being responsible for the CMS.

Testing and Approval Requirements

All new Equivalent Meters are currently required by BSCP520 to be approved by the Panel or its delegated authority, the SVG. As part of this process, the initial stages of which are managed by the Unmetered Supply User Group (UMSUG), EMs are tested against the requirements of EM Specification in BSCP520 to ensure they are fit for purpose. The UMSUG then makes a recommendation to the SVG as to whether the EM should be approved for use.

As the testing of a CMS-based EM is likely to be more frequent and wider in scope than for current passive and dynamic EMs, it is proposed that a new testing and approval process be introduced. Under this approach, an applicant (usually the CMS manufacturer but potentially a customer, Meter Administrator or Supplier) would commission the necessary testing from an accredited test agent, who would evaluate the hardware and software against the EM Specification. The results of this testing would then be presented to the UMSUG and SVG as part of the request for EM approval. Once approved, the details of the new EM would be added to an Approved Equivalent Meters List maintained by ELEXON.

This approach could also be used for any future approval of new passive or dynamic meters.

Meter Administrator Qualification

New MAs are required to undergo Qualification in accordance with BSCP537 before operating in the market. Furthermore, if an existing Meter Administrator chooses to make use of a new or different EM, the changes required to the participant's systems and processes may trigger a requirement for re-Qualification. These qualification requirements would continue to apply in the case of CMS-based EMs, but with the process making reference to the obligations set out in the new CMS Equivalent Meter Specification. It is therefore proposed that no changes are made to the Qualification processes.

Meter Administrator responsibilities

The Meter Administrator remains responsible for the data output of the Equivalent Meter, regardless of whether the CMS is being operated by the customer. As a result, most of the current requirements set out in BSCP520 and PSL170 in relation to general Meter Administrator activities would still stand. The main additional requirement for an MA would be to provide the UMSO with an extract of the data received from the CMS. This information, which would be provided on an ad-hoc basis as required, is needed by the UMSO for audit and planning purposes and would not be available through any other route.

UMSO responsibilities

The current UMSO responsibilities would remain, however some minor changes are required to reflect the UMS arrangements going forward. BSCP520 states that the UMSO nominates the type of EM to be used in a Distributor's area, before then agreeing the location of any necessary PECU arrays with the Supplier. In practice, it is the Supplier who would be suggesting the use of a new type of EM, and so it is proposed that the role of the UMSO should therefore be to agree with the Supplier, rather than nominate, the type of EM to be used.

Allocation of MSIDs

BSCP520 sections 1.3.2 'Allocation of MSIDs' and 1.3.6. 'Method of Trading' explain that for HH trading, unique MSIDs are allocated on a per UMS Certificate basis. However, section 1.3.8 'Half Hourly Trading' further implies that each MSID is associated with a particular Equivalent Meter type agreed between the Supplier and UMSO.

In theory, a UMS Certificate could contain an inventory administered using a range of different EMs, with the MA having to aggregate the output of a number of different calculations before being able to provide MSID-level consumption data to the HH Data Collector. To avoid this complexity, a formal requirement could be introduced whereby each MSID must be associated with one EM type. As a result, a Supplier would need to request additional MSIDs where multiple EM types are being used, in the same way that additional MSIDs have to be requested to accommodate alternative SSCs or PCs in NHH UMS trading.

Participants are invited to comment on whether this allocation approach would be useful or if it would be too restrictive or would have an impact on current inventory management. An indication of the changes required to BSCP520 to support this approach is included in Appendix A.

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Version History ***(mandatory by BSCCo)***

v1.0 for industry assessment.

Has this DCP been raised for discussion by a Working Group ***(optional by originator)*****: Y/N*** (delete as appropriate)

It is proposed that the responses from this DCP be reviewed by the CMS Review Group already established by the SVG.

Originator's Details:

BCA Name

Organisation: ELEXON

Email Address: ccc@elexon.co.uk

Telephone Number: 0207 380 4100

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Attachments: Y (If Yes, No. of Pages attached: 11)
(delete as appropriate)