Change Proposal – BSCP40/02	CP No: 1414 *Version No: v1.0* *(mandatory by BSCCo)*

Title *(mandatory by originator)*
Combining LDSO and Embedded LDSOs UMS Inventories on to single LDSO MSID.

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

Under the Distribution Connection and Use of System Agreement (DCUSA) Portfolio Billing arrangements, registration of MSIDs requires that end user's MSIDs be linked to a Line Loss Factor Class (LLFC) identifier. The LLFC identifier shows the voltage of connection of the embedded Licensed Distribution System Operator's (LDSO's) Distribution System to the upstream LDSO's network (i.e. embedded LDSO boundary network level) and the network voltage of the embedded LDSO's end user customer. This information is used by the upstream LDSO to bill the embedded LDSO for the use of its Distribution System.

This process works effectively for metered customers as such customers tend to have a single, or a small number of exit points per Metering System ID (MSID), typically confined to a single embedded LDSO network. In the case of Unmetered Supply (UMS) connections provided to UMS customers (and Street Lighting Authorities (SLAs) in particular), exit points are often distributed amongst a wide geographic area containing a number of different embedded LDSO Distribution Systems. Such a scenario requires that each UMS customer must trade an additional separate MSID for each embedded LDSO operating in its area. Furthermore, to accommodate inter-distributor billing, the embedded LDSO must also ensure that a separate MSID is raised for each different embedded LDSO boundary connection arrangement it has with the upstream LDSO that provides UMS connections to the UMS customer. This means that a UMS customer could potentially be required to trade, 180 separate MSIDs[1] against its portfolio of UMS connections. These additional MSIDs are required solely for inter-distributor billing purposes.

The intent of this Change Proposal (CP) is to place an obligation on an LDSO/Unmetered Supplies Operator (UMSO) to accept the combining of inventories (should the customer so wish) under a single inventory on an already-registered LDSO MSID(s). Most likely it would be that of the host LDSO[2].

Under the current arrangements, BSCP520 'Unmetered Supplies Registered in SMRS' and the

1 There are currently seven different embedded LDSO boundary network level interface connection arrangements, namely low voltage (LV)/LV, high voltage (HV)/LV, HV Plus, extra HV (EHV), 132kV/EHV, 132kV, and Grid Supply Point (GSP). There are currently five active embedded LDSOs including one host LDSO active outside its distribution services area. Each LDSO operating in the customer's area, could be required to provide a suite of MSIDs for each network level and then for each different 'switch regime' e.g. dusk till dawn, continuous etc. This would result in seven network levels per five MSIDs (four UMS operational hour bands and one Half Hour (HH)) per five embedded LDSOs plus five LDSO MSIDs, which would result in potentially 180 MSIDs. Whilst this number of MSIDs is technically possible, realistically this level would unlikely be reached for a single customer as competition in connections on new housing developments grows the number of MSIDs that UMS customer may require.

2 This will be the LDSO whose Distribution Services Area encompasses UMS customer's UMS connection portfolio.

Operational Information Document (OID) sets out the processes to be followed where an embedded LDSO is connected to an upstream[3] LDSO and subsequently connects unmetered end users to that embedded LDSO's Distribution System.

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

This CP proposes is to make the required amendments to BSCP520 and the OID to give UMS customers the option to trade their UMS connections from embedded LDSO networks under a single LDSO MSID by combining such inventories of connections with the existing inventory linked to the already-registered LDSO's MSID.

The embedded LDSO will continue to have full legal and regulatory responsibility for connections made to its Distribution System.

There is no perceived impact on Settlement systems, as the Settlement will only see aggregated data; and all UMS concerned will be connected at low voltage to LDSO and embedded LDSO networks, and therefore will have common Loss Adjustment Factors (LAFs) within a GSP Group. Therefore any embedded LDSO UMS consumption added to the LDSO MSID will simply be accumulated into the Supplier's reporting. The embedded LDSO would not require additional reporting under this proposal.

The solution will only require an inventory to only be added to an existing MSID if the existing MSID has a larger inventory and greater consumption. It will not be permitted to transfer the inventory to an MSID with a smaller inventory.

The steps outlined below, for the registration and Settlement process for Non Half Hourly (NHH) and Half Hourly (HH) UMS MSIDs, consider a typical scenario. Under this scenario, a new development is constructed and UMS connections are provided to the developer's street furniture, which the UMS Customer will subsequently adopt following completion of the development. These steps are listed to provide context only to the required changes to the BSCP and OID. These changes will enable UMS connections to be carried out without the need for the UMS customer to trade their UMS connections portfolio under a separate MSID for each permutation of LDSO and embedded LDSO boundary network level. Typically (although not exclusively) the UMS customer will be an SLA, adopting street lighting that has been installed as part of a Section 38 'highway adoption of a new development' of The Highways Act 1980.

1 At this time we do not envisage a necessity to make changes to the Settlement system itself or the Master Registration Agreement (MRA) to allow the steps listed below for the process to be implemented. However, this will be determined through the CP Impact Assessment.

2 The UMSO of the embedded LDSO will provide new UMS to a new development, registering new MSIDs issued by the embedded LDSO, as required.

3 At the time of adoption of the new assets by the street lighting authority , the MSIDs issued by the embedded UMSO to the developer will follow the disconnection procedure or amendment to inventory (to remove the adopted assets) process if the inventory covers more than one development.

4 It is proposed that the adopted assets are then added to the inventory that the street lighting

3 'Upstream' means the LDSO providing a connection to the embedded LDSO and can be the incumbent LDSO or an independent LDSO. We have used the words 'upstream' to determine the LDSO with the MSID for the original inventory that the new inventory will be added to.

authority sends to the UMSO of the upstream LDSO (usually the Host LDSO) as an inventory amendment. The upstream UMSO would follow the same process as if the adopted assets had originally been connected to the network of the upstream LDSO.

5 A process for liaison between the upstream UMSO and the embedded UMSO will be put in place to ensure that the adopted assets are included in the single inventory. This will be particularly important where new connections to an embedded network are requested directly by the Street Lighting Authority or by any other UMS customer with multiple unmetered connections on both upstream LDSO and embedded networks.

6 This change is not intended to change the relationship between the upstream LDSO and embedded LDSO in any respect apart from improving the efficiency of inter-distributor billing. Appropriate changes to the National Terms of Connection will be progressed as a parallel DCUSA CP. The customer will be required to maintain a record of the service provider within his asset database.

7 The upstream UMSO processes the inventory in the normal manner following existing BSCP520 procedures (either HH or NHH) and the UMS connections are traded in Settlement under the upstream LDSO's MSID(s).

8 The Supplier bills the customer under the upstream LDSO MSID(s).

9 The upstream LDSO bills the Supplier for UoS charges with the same consumption information.

10 Inter-distributor billing for UoS charges will be covered under a DCUSA CP.

Justification for Change *(mandatory by originator)*

We believe that BSC Objective (c)[4] is better met as the CP seeks to:

- reduce costs and administration, which will initially benefit UMS customers, and as a result the embedded LDSO, because the barrier to adoption by the SLA will have been removed – thereby promoting competition in distribution of electricity.
- Reduce the number of separate small inventories required to be traded by UMS customers. There are a relatively small number of electricity Suppliers in UMS market and smaller inventories are less attractive to many Suppliers. This change will significantly reduce the number of small inventories in the market, which in turn will make the UMS market more attractive to competition in supply[5].
- Reduce the Meter Administration burden associated with separately trading multiple inventories. The current arrangement inhibits competition in HH UMS market. Currently customers need to appoint a Meter Administrator for several inventories as opposed to one. This inhibits significantly competition in HH market due to relatively high Meter Administration charges for multiple inventories.

[4] (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 (as defined in the Transmission Licence) of electricity;

[5] This point has recognised by KPMG during an audit of an embedded UMSO inventory management arrangements

We believe that BSC Objective (d)[6] is better met as the CP seeks to:

Improve the efficiency and accuracy of the administration of UMS trading by:

- Reducing the number of small inventories that required to be traded by UMS customers. Due to the relatively low number of items on a typical embedded inventory settled NHH (average 10 streetlights), the Estimated Annual Consumption (EAC) are so small that they do not register in the 'TOT' group of the daily D0030 'Non Half Hourly DUoS Report'. This is because this field is measured in MWh to three decimal places and the EAC can be 0.000[n] of a MW. The result is that a zero charge is invoiced to the Supplier and the upstream LDSO applies a zero charge under its inter-distributor billing arrangements. This zero charge however is not passed through the customer.

- Reducing the requirement to maintain multiple separate inventories for trading purposes. Under the current arrangement customers have to maintain several inventories. This can lead to UMS apparatus being:

    - maintained on wrong inventory
    - not maintained on any inventory
    - double counted - maintained on more than one inventory

    This is already an issue for the industry, as we have been informed by some UMS customers that they already combine inventories (adding the embedded networks inventory to the host LDSO's MSID) both accidentally and intentionally (to reduce the MSID charges). This change applies governance to this practice.

    By allowing the customer to combine the inventory prior to submission to the relevant LDSO/UMSO, the LDSO/UMSO will process the request as normal and pass on the details to the relevant Supplier. We do not foresee additional administration on the part of the LDSO as result of this change. However, if the LDSO wanted validation of the inventory over and above the customer's submission, the embedded LDSO can provide details of that inventory as and when required.

    UMS customers already have the ability to 'split' inventories between different MSIDs and LDSOs/UMSOs e.g. when operating in a location bordering more than one GSP. This change can be supported by the same process.

- Reducing the number of HH traded MSIDs with relatively small consumption. The proposed solution also has the added benefit of increasing the overall efficiency of UMS trading. Under proposed solution, for HH trading, only one pecu array (or alternative system) is required to profile inventory for HH trading as opposed to multiple arrays for multiply HH MSIDs.

- Reducing compliance auditing costs. Fewer inventories will result in lower auditing costs because less sampling will be required due to there being fewer and larger inventories in place. As a result the required sample size is smaller in proportion to total inventory size.

[6] (d) promoting efficiency in the implementation and administration of the balancing and settlement arrangements;

The proposed solution will improve customer service:

- The proposed changes will deliver improved service to UMS customers by simplifying the current administration process for unmetered connections. The simplification of this process will allow customers (e.g. property developers) to award contracts to embedded LDSOs without the fear of highway adoption issues, this in turn will promote effective competition in the provision of connections and distribution services to distribution networks.

- We are also aware that some Suppliers may be levying administration charges to UMS customers on a per MSID basis. Furthermore, there is evidence that administration charges are levied against UMS customers by their nominated Meter Administrators in respect of each additional MSID that the Meter Administrator processes for the UMS customer. This practice has led to SLAs refusing to complete highway adoption agreements with developers who opt to make connections to an embedded LDSO network on the grounds of the increased administration costs that the SLA could be exposed to due to the UMS administration issues. This distorts competition as developers face additional obstacles in achieving highway adoption when connecting to an embedded LDSO rather than a LDSO network.

To which section of the Code does the CP relate, and does the CP facilitate the current provisions of the Code? *(mandatory by originator)*

BSC Section S 8, in relation to inventories.

Estimated Implementation Costs *(mandatory by BSCCo)*

Configurable Items Affected by Proposed Solution(s) *(mandatory by originator)*

BSCP520 to be amended to allow the combining of inventories and the OID with further guidance on under what circumstances, and how, inventories can be combined.

Impact on Core Industry Documents or System Operator-Transmission Owner Code *(mandatory by originator)*

None perceived.

Related Changes and/or Projects *(mandatory by BSCCo)*

DCUSA DCP168 working group – subsequently withdrawn and amended DCP203 re-submitted. Should this BSCP change be successful, a further change to the National Terms of Connection (ensuring the term UMSO captures all inventories) will need to be raised under DCUSA governance.

Details of the withdrawn DCP168 and the consultation responses to combining inventory queries can be found here: http://www.dcusa.co.uk/Public/CP.aspx?id=190

Requested Implementation Date ***(mandatory by originator)***

November 2014

Reason:

The next available release.

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

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Attachments: N (If Yes, No. of Pages attached: