Third Party Access to Licence Exempt Distribution Networks

1. Background

Regulation Change & Supporting Documents

The Electricity and Gas (Internal Market) Regulations 2011 introduced new obligations on owners of private distribution networks including a duty to facilitate third party access to electricity and gas suppliers for customers within those networks. The Regulations set out separate obligations for private network owners and Suppliers. Third party access gives electricity and gas customers the right to choose electricity and gas suppliers.

Since the introduction of the regulations certain customers that are not directly connected to a licensed distribution network (subject to certain exemptions) are entitled to request an MPAN so that they can trade electricity with any participating Suppliers.

This guidance focuses on the Balancing and Settlement Code (BSC) obligations and processes associated with facilitating third party access for electricity customers within private distribution networks.

Terminology

We use the term 'Third Party Access' to collectively describe the above processes. This guidance also uses the following terms in the context of Third Party Access:

- Boundary Point Supplier: the Supplier with responsibility for flows electricity from (or to) the licenced distribution network. This Supplier is usually appointed by the private network owner;
- Boundary Point Meter: a BSC Code of Practice (CoP) compliant Settlement Metering System located at the Boundary Point;
- Third Party Supplier: a Supplier appointed by a customer on the private network;
- Third Party Meter: a Settlement Meter installed for the customer on the private network; and
- Non Settlement Meter: a meter that is not registered for Settlement purposes.

Third Party Access

Third Party Access is the term used when a customer is embedded in a private network, has a Metering System ID (MSID) registered in the Supplier Meter Registration Service (SMRS) and has their electricity supplied by a Supplier of their choice.

2. BSC Arrangements

Third Party Access can be facilitated under the BSC in two ways.

a. Full Settlement option

This is where every customer on a private network is to have or has a Supplier. In this case every customer will have its own MPAN and Metering System. In this case there are no Metering Systems at the interface between the Licensed Distribution System and the private network and the BSC refers to the private network as an 'Associated Distribution System'.

b. Difference Metering option

The supply to the private network requires a Supplier and an appropriate Metering System and these are referred to as a Boundary Point Supplier and Boundary Point Meters. The energy recorded by the Boundary Point Meters will naturally include the consumption of all customers 'downstream' within the private network.

Prior to the regulation changes discussed in 1 above, 'downstream' customers would have arrangements in place with the network owner or landlord to purchase their electricity. However if one or more of these customers takes up the opportunity of a third party supply, then it is necessary to deduct those volumes from the main Boundary Point Meters otherwise the Boundary Point Suppliers and its customers energy volume will be incorrect. Therefore, in order to establish the correct volumes, the Meter readings of the downstream customers (those with MSIDs) must be deducted (or 'differenced') from the Boundary Point Meter to avoid double-counting the metered volume in Settlement.

This arrangement is known as Difference Metering. The approach will be applicable whenever one or more customers on the private network have a Settlement Meter with a Supplier of their choice; thus requiring the deduction of the consumption through the Third Party Meter(s) from the Boundary Point Meter.

The following diagram, figure 1, illustrates the need for a differenced metering arrangement. Without any differencing the Boundary Point Meter (recording the landlord's consumption) may record 125kWh, however 25kWh have been provided by Supplier B. Therefore the landlord should be attributed with only (125-25) 100kWh which it will distribute to its customers based on their (non Settlement) Meters.

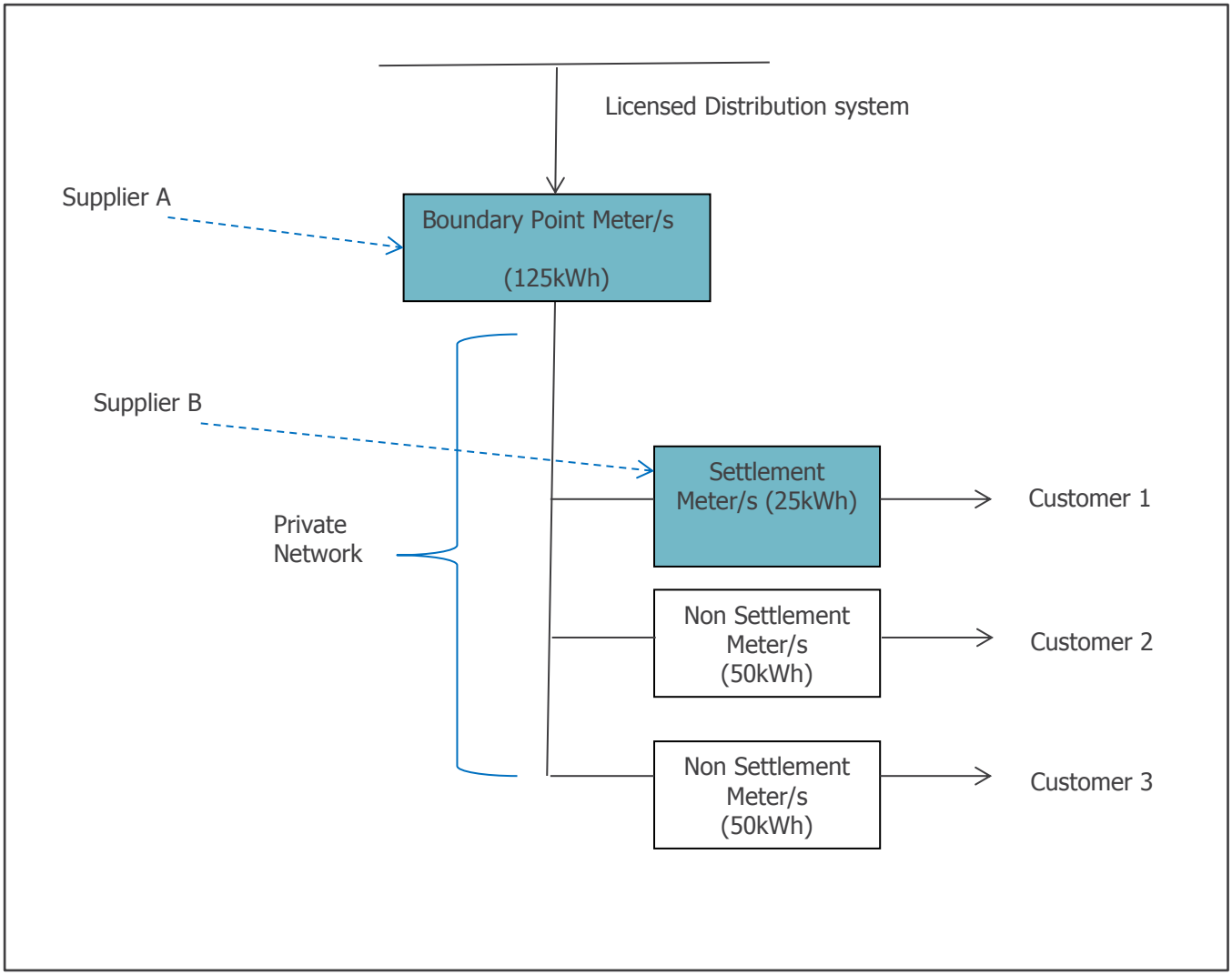


Figure 1: A simple Difference Metering arrangement

BSC Procedure 514[1] (section 8.4.3) recognises this approach as a complex site.

Because it is not possible to physically locate Third Party Meters at the point at which the private network connects to the Licensed Distribution System as required under the BSC, it is necessary to have a Metering Dispensation in place. This process is considered in more detail below.

Can this approach be applied to Non Half Hourly (NHH) Meters?

Difference Metering (as currently envisaged) requires the Boundary Point Meter and Third Party Meter to be HH, although other non-Settlement Meters on the network could be NHH. Third party supply through NHH Meters currently requires the full Settlement option (or alternatively Parties can propose new solutions through the Change Proposal (CP) or Modification Proposal processes).

At present the only option is therefore to treat these as HH-only, although this does not prevent future changes to the rules.

[1] 'SVA Meter Operations for Metering Systems Registered in SMRS'.

3. Difference Metering & Metering Dispensation

What is a Metering Dispensation?

BSC Section L3.2 requires that all Metering Equipment either:

- Complies with the requirements set out in the relevant CoP at the time of the Metering System's first registration for Settlement; or
- Is the subject of, and complies with, a Metering Dispensation.

Section L3.4 makes provision for the BSC Panel to establish (or the Registrant of a Metering System to apply for) a Metering Dispensation if, for financial or practical reasons, Metering Equipment will not or does not comply with some or all the requirements of a CoP.

The process for applying for a Metering Dispensation is set out in BSCP32: Metering Dispensations.

Why is a Metering Dispensation needed?

The BSC CoPs describe the Defined Metering Point (DMP) location as being the point where the customer connects to the Licensed Distribution Network. However, the Meters of customers who are 'downstream' within a private network will be located at the point of connection to the private network. This means that it is not practical to comply with the relevant CoP in these circumstances. A Metering Dispensation is therefore required to allow this departure from the CoP requirement.

To assist with this process ELEXON has established a generic type of Metering Dispensation D/380 which is applicable for circuits up to a rated capacity of 10MVA. This is a pre-approved Metering Dispensation which Suppliers may use for third party access customers providing the only departure from either CoP 5 or 3 is the location of Meters. In other words, if there are other aspects of non-compliance then the Supplier must apply for a 'site specific' Metering Dispensation.

Should losses be accounted for?

As with any electrical system there are losses to be considered. This is especially the case when Meters are not located at the Boundary Point and were difference metering is in place as will be the case with third party access networks. Without properly taking into account the electrical losses between the two sets of Meters (the Boundary Point Meters and the Third Party Meters) either the Boundary Point customer or the Third Party customer may be adversely advantaged or disadvantaged as the case may be.

For example: The Import energy attributable to a Third Party customer will be:

- Third Party Meter advance + Private Network losses;

And for customer exports;

- Third Party Meter advance – Private Network Losses.

Similarly, the volumes attributable to the landlord will be the difference between the Boundary Point Meter advances and the advances on the Third Party Meters including losses.

How are losses applied?

Losses can be applied as constants or factors to either the Meters directly or after the data has been collected from them. The Suppliers will need to ensure that the actual method used is consistent throughout the arrangements so that there is no possibility of accounting for losses twice.

How are losses determined?

The private network owner is required to determine the electrical losses on its system and this will feature in its methodology statement.

Note: The BSC requires Licensed Distributor Network Operators to calculate Line Loss Factors (LLFs) that account for electrical losses between the Transmission Network and Boundary Point Meter of the private network, i.e. losses over the Licensed Distribution Network only. The same LLFs will be applied to both Boundary Point Meters and Third Party Meters **in addition to** line losses of the private network being applied to Third Party Meters.

A note on reactive energy

As well as its downstream customer's creating or absorbing reactive energy, networks too will contribute towards the overall reactive position at the Boundary Point based on the amount and type of equipment within that network. Because of this, it may not be possible to predict the effect individual customers have on the reactive position at the Boundary Point.

In most cases (and if the reactive position is significant enough to attract charges) reactive charges will be applied to the Boundary Point Supplier by the Licensed Distribution System Operator (LDSO) based on its Meter readings. How these charges are to be distributed by the private network owner will normally be included in the methodology statement. Therefore Suppliers need to ensure that reactive energy is dealt with in accordance with the network owner's methodology.

For example, a private network owner may wish to pass on any reactive changes it receives to all of the customers on its network based on their own Meter readings. In which case differencing of reactive readings is not required. The private network owner would require the reactive readings of its customers which can be provided by the relevant Suppliers. For Settlement purposes the registration of any reactive measurement quantities of Third Party Meters should be unassigned ('UN') in the D0268 'Half Hourly Meter Technical Details' Data Transfer Network (DTN) flow and not feature in the Complex Metering arrangements of BSC Procedure BSCP514[2] and BSCP502[3].

CoP requirements

CoPs 1, 2, 3 and 5 Section 4.3.3 'Compensation for Power Transformer and Line Losses' state that:

*'where the **Actual Metering Point (AMP)** and the **Defined Metering Point (DMP)** do not coincide a Metering Dispensation shall be applied for and, where necessary, accuracy compensation for power transformer and/or line losses shall be provided to meet the overall accuracy at the Defined Metering Point'.*

[2] SVA Meter Operations for Metering Systems Registered in SMRS
[3] Half Hourly Data Collection for Sva Metering Systems Registered in SMRA

4. D/380 Generic Metering Dispensation for Third Party Access

A Generic Metering Dispensation D/380 was approved for use in September 2012 and is relevant for Metering Systems for CoP5 or CoP3. D/380 applies to Registrants (Suppliers) whose customers are embedded within a Licence Exempt Distribution Network (private network) and are seeking competitive supply. Providing that the only departure from the CoP requirements is the location of the Metering Equipment, and that the **other conditions** associated with the Generic Dispensation are met (see Guidance on D/380), these Suppliers can then proceed with the arrangements without the need to apply for a Site-Specific Dispensation. In all other respects the Metering Equipment must comply with the relevant CoP(s).

Note that the Generic Dispensation only relates to the location of the Meter, and that Site-Specific Dispensations will still be required where there are other CoP non-compliances. There are also certain specific conditions attached to use of the Generic Dispensation as described below.

What conditions must be met to use D/380?

In order to minimise any risk to Settlement, the Supplier Volume Allocation Group (SVG) and Imbalance Settlement Group (ISG) have established the following conditions that must be met in order to use D/380:

1. Losses will be allocated appropriately;

2. All Parties associated with the supply understand and agree to the arrangements being put in place;

3. Data integrity will be maintained by the appointment of appropriate Party Agents;

4. To give ELEXON visibility of all sites that come under D/380, the Third Party Supplier will use Meter Timeswitch Class (MTC) '997'; and

5. The Registrant declares compliance with all other aspects of the BSC and CoP requirements relating to Metering Equipment.

Condition 1 - Treatment of Losses

Suppliers must account for the electrical losses between the Defined Metering Point (DMP) and the Actual Metering Point (AMP) in order to ensure that there is no adverse impact on any one Party or on Settlement. Suppliers will be required to maintain (and, at the request of the BSC Panel or Technical Assurance Agent, produce) evidence that losses have been accounted for appropriately.

Treatment of losses for Difference Metering on a private network

Normally, Meter readings are adjusted to the Settlement Boundary Point. In the case of a customer on a private network, this would mean scaling up their Meter reading to allow for losses on the private network before then applying a Settlement Line Loss Factor (LLF) to adjust for losses on the Licensed Distribution Network. Therefore the same LLFs are to be applied to the Boundary Meter and to Third Party Meters on the private network. Adjusting to the Settlement Boundary Point in this way ensures that the losses caused by the customer are not included in the relevant Grid Supply Point (GSP) Group Take in Settlement.

When considering Difference Metering on a private network, the arguments are somewhat different, for two reasons:

- There is no risk of the losses on the private network being allocated to Suppliers generally through GSP Group Correction. The nature of Difference Metering is that any losses not allocated to the customer (through adjusting the reading of the Third Party Meter) will instead be allocated to the

Boundary Meter (and billed to the private network operator by the Boundary Supplier), rather than being allocated to Suppliers generally.

- The Settlement arrangements also have to fit in with the Ofgem-approved charging methodology. In some cases this methodology could be based on the premise that the network operator pays the Boundary Supplier for all losses on the private network (and recovers the costs in distribution charges).

Condition 2 - Informing all parties

Why should all parties agree?

Third Party Access impacts parties other than the Supplier of the embedded customer; it also requires an element of collaboration between different parties. It is therefore necessary for the Supplier in question to consult with and seek agreement from other impacted parties affected by the arrangements.

Who are the impacted parties?

In all cases, impacted parties will include at least:

- The Boundary Point Supplier;
- The private network owner;[4] and
- The LDSO.

Can I expect collaboration from the private network owner & Boundary Point Supplier?

As this is a legal obligation, we expect the private network owner and the Boundary Point Supplier to facilitate the customer application for third party supply.

ELEXON will facilitate and support parties gaining Third Party Access to the extent that ELEXON is able to do so in relation to BSC Settlement. Once the metering has been set-up, any further problems can be resolved by the Trading Disputes process.

Condition 3 - Appointment of common Party Agents

In order to maintain Settlement integrity, it is essential that Suppliers for embedded customers within the private network appoint the same Half Hourly Meter Operator Agent (HHMOA) and the same Half Hourly Data Collector (HHDC) as the Boundary Point Supplier for the reasons explained below.

Appointment of HHMOA

The Boundary Point MOA will need to maintain accurate Meter Technical Details (MTDs) and the complex site supplementary information as required by BSCP514. Detailed technical information about Metering Equipment needs to be communicated to the HHDC for all Metering Systems involved, so that the HHDC can perform the difference metering correctly. It is important that this information is accurate, and BSCPs 502[5] and 514 requires the use of a single MOA so that this MOA has visibility of all the Metering Systems that make up the private network.

[4] Not a BSC Party.
[5] 'Half Hourly Data Collection for SVA Metering Systems registered in SMRS'.

Appointment of HHDC

One of the main risks to Settlement is the HHDC failing to subtract the consumption of all the Third Party Meters from the Meter readings on the Boundary Point Meter. The Difference Metering arrangements in BSCPs 502 and 514 therefore require the use of a single HHDC with access to the HH data of all Metering Systems involved. It would not be appropriate for HHDCs to have access to Metering Systems (and related data) to which they have not been appointed by the Supplier.

As a potential third party Supplier how will I know which Party Agents to appoint?

The private network owner may provide the identity of its Supplier and the Boundary Point suppliers will provide the identity of its Party Agents.

Condition 4 - Provide ELEXON with MSIDs of the sites involved and use Meter Timeswitch Class '997'

Why do I need to provide the details of the MSID and use MTC 997?

Currently, there are no existing mechanisms in the industry processes to identify Settlement Metering Systems that are embedded in private networks. A Meter Timeswitch Class can help potential Suppliers identify whether differencing arrangements and dispensations are relevant for a particular customer.

Providing a list of the MSIDs will allow ELEXON to maintain a record of which sites are using the Difference Metering arrangement on a private network. This is important to allow the SVG to monitor the number of sites involved, so that it can consider whether any further compliance checks are necessary (e.g. a targeted Technical Assurance Agent check under the Performance Assurance Framework (PAF)).

How do I enable MTC 997?

To enable MTC 997 in a particular distribution area[6], you will need to link the MTC to the LDSO Market Participant ID (MPID) in Market Domain Data (MDD). To do this, you will need to complete a BSCP509[7]/01 form and an Entity 53 form[*], available here. BSCP509 requires changes to this entity to be agreed with the relevant LDSO prior to formal submission of the change. The forms should be submitted to the MDD Coordinator by the relevant deadline. You can view the MDD release schedule here.

When creating a HH combination, you must ensure that the MTC is available within that distribution area by filling out an Entity 53 (MTC for Distributor) form. The combination is then built up by completing an Entity 55 (Valid MTC Line Loss Factor Class combination) form, as long as a Line Loss Factor Class (LLFC) already exists. Where a new LLFC has to be created, the LDSO will need to complete an Entity 17 (LLFC) form.

All MDD BSCP509 forms are available here.

[6] This section only applies where no-one has previously used MTC 997 in that distribution area (and therefore it is not set up in MDD).
[7] 'Changes to Market Domain Data'.
[*] BSCP509 Appendix: MDD Entity Change Request Forms

If MTC 997 is not enabled within my distribution area or there is a new LLFC that needs to be created, do I need to wait for the combination to be live in MDD before I can use D/380?

You can use D/380 as long as you can show evidence that you are progressing the required changes in order to have a valid LLFC/MTC combination. A valid LLFC/MTC997 combination is needed to ensure MSIDs within private networks can be identified; hence it is desirable to have a valid combination implemented as soon as possible.

We recognise there can be a lead time in progressing the necessary MDD changes. The purpose of D/380 is to accelerate customers' access to competitive supply, and in such circumstances, Registrants should therefore use a different valid LLFC/MTC combination for the time being and switch to MTC997 as soon as a valid LLFC/MTC997 combination is available.

How should I send the information to ELEXON?

You can find the D/380 Declaration of Use/Compliance Form on ELEXON's website at: Metering Dispensations

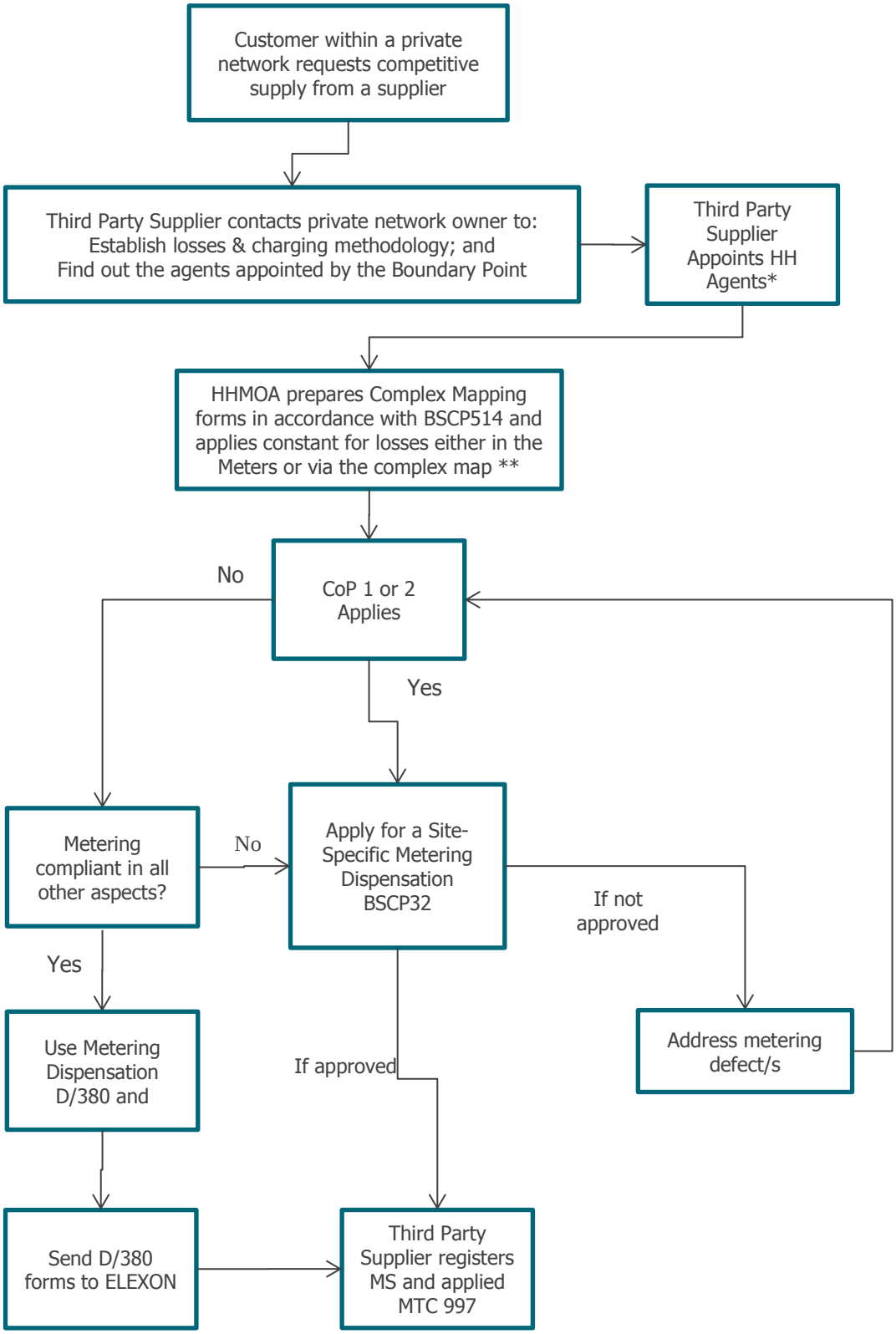
Please complete this form and return it by email to dispensations@elexon.co.uk with 'D/380 declaration of use/compliance' in the subject line. The form requires a signature – this can be achieved by using an electronic signature, or by emailing us a scanned copy of the form.

Condition 5 – Declare compliance

Generic Metering Dispensation D/380 is intended to cover 'standard' Difference Metering scenarios on private networks. In all other cases, i.e. where there are other non-compliances or complicating factors to be considered (such as non-standard current and/or voltage transformers), Registrants will need to apply for a Site-Specific Metering Dispensation which will be considered on a case-by-case basis. This can be done using BSCP32.

We need participants to consider all aspects of BSC and CoP requirements and confirm to ELEXON that, with the exception of the Meter location, every aspect of their arrangement is compliant. The declaration should be made when informing ELEXON of the MSID using the same D/380 Declaration of Use/Compliance Form referenced above.

Summary



* It may be necessary for the MOA to visit site prior to accepting an appointment to understand the existing metering arrangements of the Third Party customer.

** Reactive data differencing or mapping will not be required.

Need more information?

If you require further information about the use of Generic Dispensation D/380 or the interaction between the Third Party Access arrangements and Settlement, please contact:

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For more information please contact the **BSC Service Desk** at bscservicedesk@cgi.com or call **0870 010 6950**.