



Settlement Considerations for Third Party Access to Private Networks

Meeting Name	Supplier Volume Allocation Group
Meeting Date	06 June 2012
Purpose of paper	For Decision
Summary	SVG133/07 highlighted BSC Settlement issues for Suppliers with potential customers on private networks where those customers are seeking third party access to private networks. This paper follows on from SVG133/07 and proposes solutions to those issues. We invite the SVG to agree the solutions proposed for further development.

1. Background

- 1.1 The Electricity and Gas (Internal Market) Regulations 2011 came into force in November, and Schedule 2 of the Regulations describes the process for customers to choose their own gas and electricity Supplier, which can be summarised¹ as follows:
 - A customer who wants to choose their own Supplier must provide the private network operator with an expression of interest, including evidence that at least one Supplier would be willing to provide the supply;
 - Within 20 Working Days, the private network operator must specify the metering or contractual arrangements that would be required in order to allow competitive supply.
- 1.2 Department of Energy and Climate Change (DECC) produced a guidance² on the steps that private network operators need to take in order to comply with the Regulations.
- 1.3 We have had a number of stakeholders who have asked us for advice on the BSC arrangements that support this, and who have suggested possible improvements to BSC processes, which we are currently investigating. We presented a paper to the February [SVG 133/07](#) drawing out some of the Settlement issues and highlighting the current BSC arrangements.
- 1.4 Since then, we have attended an Industry working group set up the Energy Networks Association (ENA) and attended by Distribution Network Operators (DNOs), private network operators, code administrators and Ofgem to discuss the two broad approaches identified in the guidance provided by DECC. As part of this discussion issues impacting Settlement and distribution businesses were identified.
- 1.5 This paper provides potential solutions to the issues highlighted, however the SVG should note that these issues do not prevent operators of private networks from complying with their obligations under the Regulations.

¹ For full details of the process, please consult Schedule 2 of the Regulations, which are available at <http://www.legislation.gov.uk/ukxi/2011/2704/contents/made>

² <http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/energy-markets/4511-guidance-third-party-access-elec-gas.pdf>



2. Third Party Access Working Group (TPAWG)

2.1 The first meeting took place on the 23 April at ELEXON's Offices. The main items discussed included the:

- Appointment of the Chair;
- Terms of Reference;
- SVG 133/07 paper; and
- Scope of the working group.

2.2 We circulated this paper to the TPAWG to give an opportunity for members to comment on the solutions proposed in this paper and took this into consideration while drafting this paper.

3. Principles in developing solution

3.1 We applied the following principles while evaluating/devising the solutions:

- Solutions should be cost effective and proportionate (bearing in mind that volume of customers wishing to participate is currently uncertain);
- BSC Objectives - Maintaining Settlement integrity and BSC obligations; and
- Flexibility – The solutions in place can be easily tweaked after implementation. We believe that as more customers opt for third party access we will uncover further issues, thus improvement must be easily accommodated.

4. Nomenclature

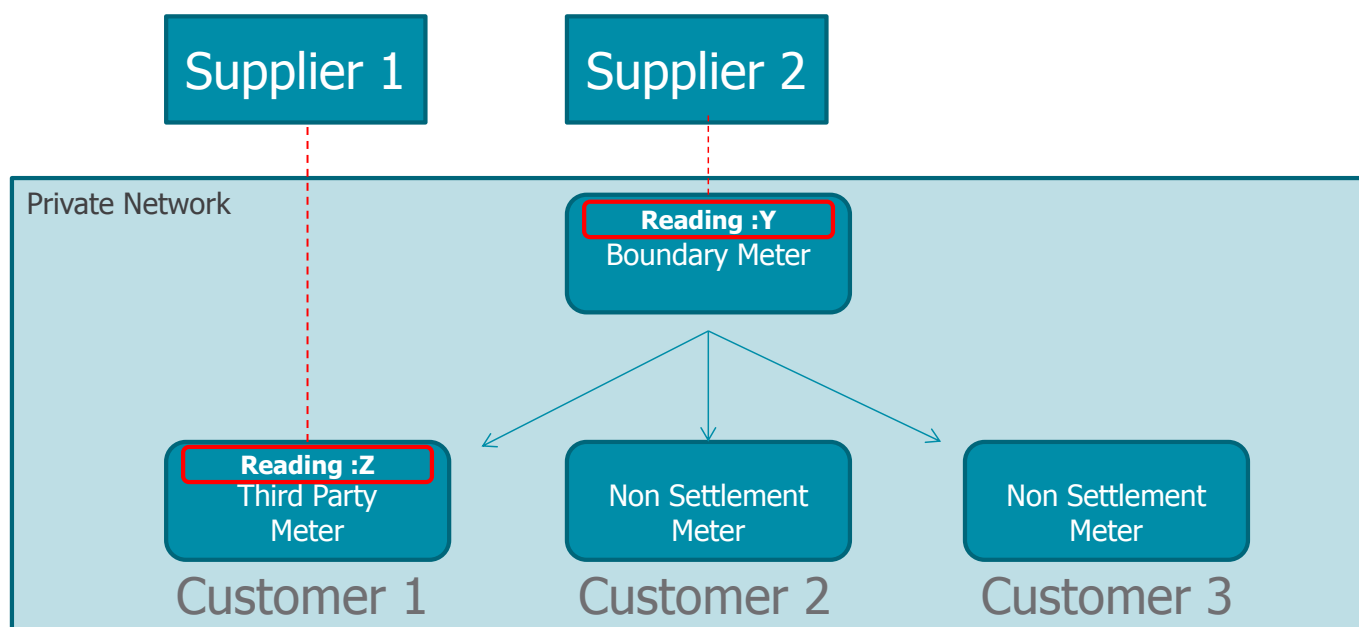
4.1 There are recognised BSC/Industry terms used for metering set-ups in other contexts e.g. primary/secondary meters, main/sub meters etc. For the purpose of this paper, we have defined a few terms to minimise confusion with other metering set-ups; as follows:

- Boundary Point Supplier: The Supplier appointed at the Boundary Point of the private network; usually appointed by the Private Network owner;
- Boundary Point Meter: Code of Practice (CoP) Compliant Settlement Meter at the Boundary Point;
- Third Party Supplier: A Supplier appointed by a customer on the private network;
- Third Party Meter: CoP compliant Settlement Meter for the customer on the private network; and
- Non-Settlement Meter: A meter that has not been certified as CoP compliant but is compliant with the requirements of Schedule 7 of the Electricity Act 1989, i.e. a meter approved under UK national legislation or, after October 2006, under the European Measuring Instruments Directive (MID 2004/22/EC) which is suitable for billing purposes.

5. Current Options

5.1 SVG 133/07 and the DECC guidance on third party access highlighted two options currently supported in the BSC:

- Full Settlement option which requires every customer on the private network to have a Settlement CoP compliant Metering System and an MPAN. A private network where this is the case is referred to in the BSC as an 'Associated Distribution System'.
- Difference Metering where one or more (not all) 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. This is illustrated below. This option is recognised in BSC Procedure (BSCP) 514³ (8.4.3) as a complex site.



5.2 For Settlement purposes:

- Customer 1's readings: Z
- Landlord's reading (Boundary Point Meter): Y-Z

Further Options

5.3 During the TPAWG, we identified a possible third option which involved a similar arrangement to meter period data splitting⁴. It involves the agreement between the Suppliers on the private network on the usage

³ 'SVA Meter Operations for Metering Systems Registered in SMRS'

⁴ BSCP550 'Shared SVA Meter Arrangement of Half Hourly Import and Export Active Energy' describes several methods for splitting Boundary Point meter period data between more than one customer/generator below a single Boundary Point.



at the site and requires the Suppliers to agree an Allocation Schedule for each Settlement Period such that the net energy allocation to the Suppliers is equal to the total consumption at the site.

Note: CP 1369 (Increased Flexibility in BSCP550 Data Splitting Algorithms) should remove some of the barriers to this solution, and was recently approved by SVG for implementation as part of November 2012 release.

5.4 Another option can be a private commercial arrangement between impacted parties with no impact on Settlement.

5.5 An assessment of the various options is shown in the table below.

Option	For	Against	Proposed Action
Full Settlement	No particular Settlement issues.	Only applies if private network operator is willing to install settlement-compliant metering for all customers on the network. Requires contract for registration and related services.	Guidance may be required if there is interest in this option. For the time being we do not propose any further action.
Difference Metering	Maintains Settlement integrity. Arrangement in place and already implemented by some sites; therefore this option works. No major impact on other SVA processes and Industry codes, cheaper industry cost.	Require application for metering dispensation, hence may incur delay in implementation. Current process may not support large volume of requests by Suppliers for their potential customers. Requires additional processes from the Half-Hourly Data Collector (HHDC) ⁵ . Currently requires appointment of same DC and Meter Operator Agent (MOA). No mechanism for third party Suppliers to know the arrangement on the private network. Cost implications for replacing non-Settlement meters and installing Settlement Meters. May require network costs surrounding installing a meter for the first time where the costs of services were built into the rent or service charges. A process to understand when the last meter on the site is installed thereby moving to Full Settlement metering and a need to 'disconnect' the Metering Point at the boundary.	We believe this option works. However, in order to allow for larger scale implementation, we propose further investigation and possible changes in this area.

⁵ This option works only with HH Hourly, further details in Section 9



Option	For	Against	Proposed Action
Allocating Consumption between Suppliers	<p>Similar to difference metering, without the need to apply for a Metering Dispensation; thus avoiding the administrative burden.</p> <p>Can avoid some of the complexities of difference metering from the HHDC perspective.</p> <p>There may be lower costs particularly of replacing metering equipment for the customer.</p>	<p>Requires agreement from all impacted parties which may not necessarily happen in every instance.</p> <p><i>Note: This option won't be available unless there is agreement from all parties</i></p> <p>Customer may be cost constrained for choices for future change of Suppliers</p>	<p>This option can be a feasible alternative should difference metering prove impracticable for a specific site.</p> <p>We do not believe any Settlement issues with this option, however we believe customers will benefit from guidance on how to implement this option to achieve compliance with the BSC.</p> <p>The view of the TPAWG was this option can be explored further at a later date should there be interest from parties.</p>
Private commercial arrangement between impacted parties	<p>No impact on Settlement.</p>	<p>Complex commercial arrangements between Suppliers.</p>	<p>Not in scope of the BSC.</p>

5.6 With consideration on the table above, we narrowed the focus of this paper to provide changes and clarification to the difference metering process focussing on the following:

- Appointment of Party Agents;
- Applications for Metering Dispensations for difference metering;
- Appointment and Change of Supplier;
- NHH Settlement for customers; and
- Accounting for electrical losses on the private network.

Note: The rest of the paper focusses on the issues associated with difference metering.

6. Appointment of Party Agents

6.1 The current requirements to allow difference metering to happen require the Third Party Supplier to appoint the same HHMOA and HHDC as the Boundary Point Supplier. We have highlighted some of the key processes and associated data flows for getting the metered data to the Supplier Volume Allocation Agent (SVAA) in Appendix 1. This emphasizes the importance of the HHDC in getting the consumption data to Settlement while the MOA has no input at that stage of the process.

6.2 Many of the Settlement processes will remain as-is with the HHDC required to perform the differencing.



6.3 The table below highlights the responsibilities of the HHMOA and HHDC and the risk associated in not complying with the requirements of appointing a common HHMOA and HHDC; hence whether alternatives to appoint different DCs/MOAs can be recommended.

Role	Responsibilities	Risk	Proposed Action
HHMOA	<p>HHMOA is required to install, commission, test, maintain, rectify faults and provide sealing service for Metering Equipment inclusive any CT installations on the complex site.</p> <p>HHMOA to maintain MTDs and provide the details to HHDC, Supplier or LDSO, including complex site supplementary information as per BSCP514.</p>	<p>BSCP514⁶ requires the site to appoint the same HHMOA.</p> <p>Requires HHMOA to use complex site supplementary information.</p> <p>One of the main risks to Settlement is if the HHMOA carries out work on the third party Settlement Meter and does not provide the MTDs (D0268s) to the HHDCs. This risk is not lowered by appointing the same HHMOA.</p> <p>Settlement will not be compromised if a different HHMOA is appointed and it meets its BSC obligations.</p>	<p>Remove the requirement for appointment of the same HHMOA on the Boundary and Third Party Meters while emphasising appointment of a common HHMOA as good practice.</p> <p>The Boundary Point HHMOA will need to maintain the complex site supplementary information.</p> <p>The private network owner may wish to include a clause within their commercial arrangements with their customer for the HHMOA to provide updated complex site supplementary information to the Boundary Point HHDC in time for each new customer who achieves a third party supply.</p>
HHDC	<p>HHDC is required to retrieve, validate and process metering data for SVA Metering Systems.</p>	<p>As above, BSCP502⁷ requires the same HHDC is appointed</p> <p>One of the main risks to Settlement is the HHDC failing to subtract the consumption on the Third Party Meter from the Meter reading on the Boundary Point Meter.</p> <p>This risk will be significantly higher should there be more than one HHDC appointed to the Metering Systems on the private network.</p>	<p>Maintain the BSCP requirement to appoint the same HHDC.</p>

⁶ SVA Meter Operations for Metering Systems Registered in SMRS

⁷ Half Hourly Data Collection for SVA Metering Systems Registered in SMRS



7. The Metering Dispensation Process

- 7.1 With the current BSC arrangements, the Registrant of the Third Party Metering System will need to apply for a Metering Dispensation to allow difference metering to take place. This process is set out in [BSCP32](#) and ELEXON will guide the applicant through the process.
- 7.2 The current high level process is shown in Appendix 2. Whilst applications will differ, generally a typical application for dispensation will take around six weeks and dependent on the relevant panel committee meeting timings after the application has been submitted. The process includes:
- Application received and acknowledged and a Dispensation Reference is allocated by ELEXON;
 - ELEXON provides a view on the application prior to sending the application to the Metering Dispensation Review Group (MDRG) and relevant LDSO for comment;
 - ELEXON prepares a paper for the relevant committee(s) (ISG or SVG)⁸ incorporating its view and those of the MDRG and relevant LDSO and presents it; and
 - ELEXON informs the applicant of the committee decision and the date the Metering System can become effective in Settlements.

Issues with Dispensation Process for Third Party Access

- 7.3 The BSC requires a Registrant to apply for a metering dispensation to enable differencing. We believe the dispensation process is burdensome and have looked at alternatives.
- 7.4 We investigated two options:
- Generic dispensation: The BSC Panel may, on its own initiative or upon the application of a Party, establish Metering Dispensations from the requirements of any relevant Code of Practice; and
 - A simplified Metering Dispensation process for difference metering: This would bypass some steps of a typical Metering Dispensation application, e.g. allowing parties to comment on application.

Option	For	Against	Proposed Action
Simplified Dispensation Process	<p>Benefits from metering experts review and minimises risks due to non-compliances.</p> <p>Less time consuming for parties than current Metering Dispensation process.</p>	<p>Does not entirely remove the administrative burden on Registrants and ELEXON.</p> <p>May still cause delay for end consumer and private network owner.</p> <p>Not all impacted parties will have opportunity to comment.</p> <p>Requires additional guidance and possible changes to BSCP32.</p>	<p>A simplified Metering Dispensation process is still fairly administrative and we believe it may not suit the higher volumes of applications.</p> <p>The process need to be agreed/developed and may require changes to BSCP32.</p>

⁸ CoP5 is owned by SVG, CoP3 by both SVG and ISG and CoP2 and above by ISG only.



Option	For	Against	Proposed Action
Generic Dispensation	<p>Remove the need to apply for Metering Dispensation for sites meeting the requirements.</p> <p>Aligned with the 20WDs requirement for private network owner to specify requirements.</p>	<p>No initial quality assurance and expert input on the site.</p>	<p>We propose a generic Metering Dispensation for Metering Systems of customers needing third party access.</p> <p>As the J0461 (Meter COP Dispensation) data item is not included in the D0268 (Meter Technical Details) data flow; we propose including a requirement for parties to inform ELEXON of the sites they have used for this generic Metering Dispensation until an initiative is implemented that can track these MPANs.</p> <p>Consider third party access sites within Performance Assurance Framework scope for 2013/14.</p>

- 7.5 The generic Metering Dispensation will be designed to cover a fair proportion of customers requiring third party access, however we believe there will still be cases needing to be progressed via the standard Metering Dispensation process, for example, where it is not possible to install a CoP compliant Meter.

8. Change and Appointment of Supplier

- 8.1 Whether it is a Change of Supplier (CoS) or the appointment of a Third Party Supplier, there is no mechanism currently to enable a Supplier to know what arrangements are in place in a given private network. The options that have been explored are described below.

MPAN Core Coding

- 8.2 This option involves creating a specific pattern for the MPAN to identify the metering arrangement on the private network within the 13 digits. The option was dismissed in the TPAWG. due to:
- High resource (time and costs) associated with implementing the solution;
 - Impact on the numerous SVA systems and Industry codes;
 - Currently the volume of customer request is unknown; and
 - There will be sites with third party access effective before such a solution is developed; therefore there will be the risk of some MPANs with numbers outside of the pattern.
- 8.3 For the reasons above, we believe it is preferable for the 13 digits MPAN core pattern to remain as-is and consideration given to using the other supplementary information to distinguish between such sites described below.



Meter Timeswitch Codes

- 8.4 Meter Timeswitch Codes (MTCs) were designed to allow Suppliers to identify the metering installed in Customers' premises. Whilst the J0220 (MTC) data item is not present in the D0268, it can help Suppliers identify the sites as it will appear as part of the MPAN.
- 8.5 During TPAWG, one of the concerns highlighted that MTCs are not necessarily updated appropriately by Suppliers, hence the quality is questionable. The process of creating a new MTC is simpler than current alternatives and the Market Domain Data (MDD) change request (Entity 52) can be initiated by ELEXON. We believe this can be used as a 'quick win' and once implemented we will monitor its effectiveness and provide further changes to the process if required.
- 8.6 There was further suggestion to use 1st address line of the MPAN, which is a free text field, to highlight a private network, e.g. 'ENO – Name of Site'. We believe this is also quick win that can be adopted by Industry.
- 8.7 We propose to have a new MTC created for the MPANs that are within a private network.

Complex Site Supplementary Information

- 8.8 As well as the MTC, the use of complex site supplementary information is required for the HHDC to perform the differencing. The MOA of the Boundary Point Meter must maintain and provide the complex site supplementary to the HHDC and other parties as per BSCP514.

9. NHH Settlement

- 9.1 The Third Party Meter must be capable of producing Half Hourly data to allow differencing to happen and it is assumed the customer will be HH settled. During the TPAWG, we discussed the option of a customer wishing to be traded NHH. We explored the possibility of installing a NHH meter which can produce HH Settlement quality data.
- 9.2 It was agreed that this option may be difficult for some agents due to the underlying complexities of NHH agent interacting with HH agents (For example the NHH agents may not be able to send D0036⁹) and the systems and processes are not in place to allow this to happen. Moreover, the customer must appoint the same the DC which will be a HHDC.
- 9.3 This requires the Third Party Meter to be HH settled for difference metering, thus the relevant BSCPs should be updated to emphasize this with the provision that changes could be progressed in the future.

10. Further Issues

Parties Collaboration

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

⁹ 'Validated Half Hourly Advances for Inclusion in Aggregated Supplier Matrix'



10.2 ELEXON will facilitate and support parties gaining third party access to the extent that ELEXON is able to do so in relation to BSC Settlements. Further problems, once the metering has been set-up, can be resolved by the Trading Disputes¹⁰ process.

Accounting for Losses

- 10.3 Any difference metering solution must include an appropriate mechanism for accounting for electrical losses, both on the licensed Distribution System, and on the private network.
- 10.4 The BSC requires Licensed Distributors 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 Distribution Network. We would therefore expect the same LLF to be applied to the Boundary Meter and to Third Party Meters on the private network.
- 10.5 With regards to losses on the private network, there are two options which could be progressed:
- Agreement between parties in applying an adjustment factor to the Third Party Meter readings (before they are subtracted from the Boundary Meter readings) to compensate for the losses within the private network. This option ensures that the Boundary Point Supplier and the Third Party Supplier(s) share responsibility under the BSC for the losses on the private network, but it requires a process for the Suppliers involved to agree the adjustment factors; or
 - No adjustment of Third Party Meter readings for losses on the private network. This means that all such losses remain the responsibility of the Boundary Point Supplier for BSC purposes (but does not preclude the private network owner from including an allowance for losses on the private network in the use of system charges made to Third Party Suppliers and/or customers).
- 10.6 We recommend the second option due to the ease of implementation and reduced complexities.

11. Summary of Changes

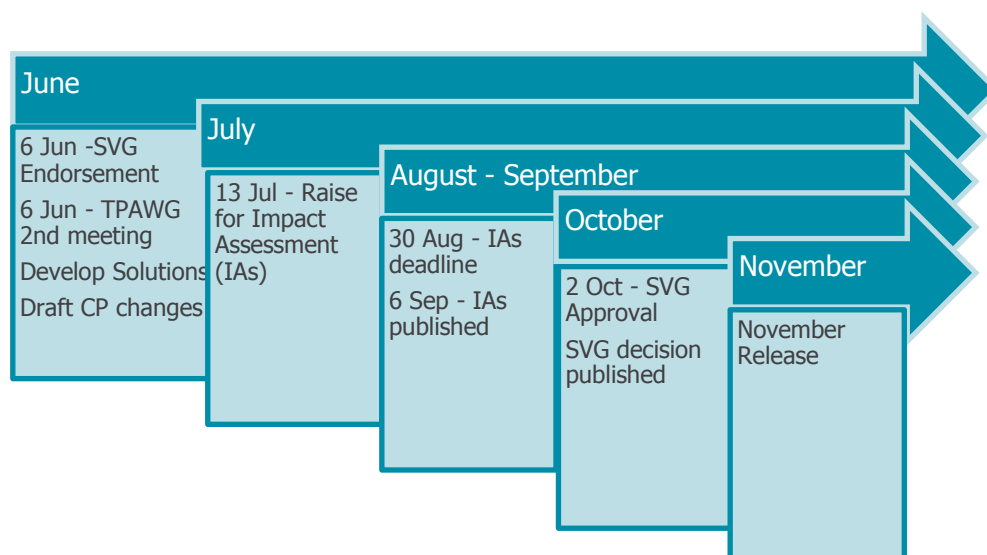
- 11.1 The following are a summary of the changes we are proposing and they are applicable to difference metering scenario:
- Generic dispensation for sites requiring third party access;
 - Create new MTC and use MPAN first address line for Third Party Customers within a private network;
 - Maintain the requirement for the appointment of a common HHDC;
 - Remove the requirement for appointment of a common HHMOA;
 - Maintain the requirement for customers wishing to have third party access to be HH Settled;
 - Retain the requirement for MOAs of Boundary Point Meter to maintain the complex site supplementary information; and
 - Consider within the Performance Assurance Framework for Audit year 2013/2014.

¹⁰ BSCP11 'Trading Disputes'



11.2 Furthermore private network owners and customers need to aware that ELEXON will not be making any arrangements for how losses will be compensated and losses with be handled as described in Section 10.

12. Next Steps & Timeline



13. Recommendations

13.1 We invite you to:

- a) **NOTE** the principles with developing the solutions to the BSC issues for third party access on private networks; and
- b) **ENDORSE** the changes highlighted in paragraph 11 be developed for implementation as per timeline.

List of Appendices:

Appendix 1 – HH Meter to SVAA process diagram
Appendix 2 – Current Meter dispensation

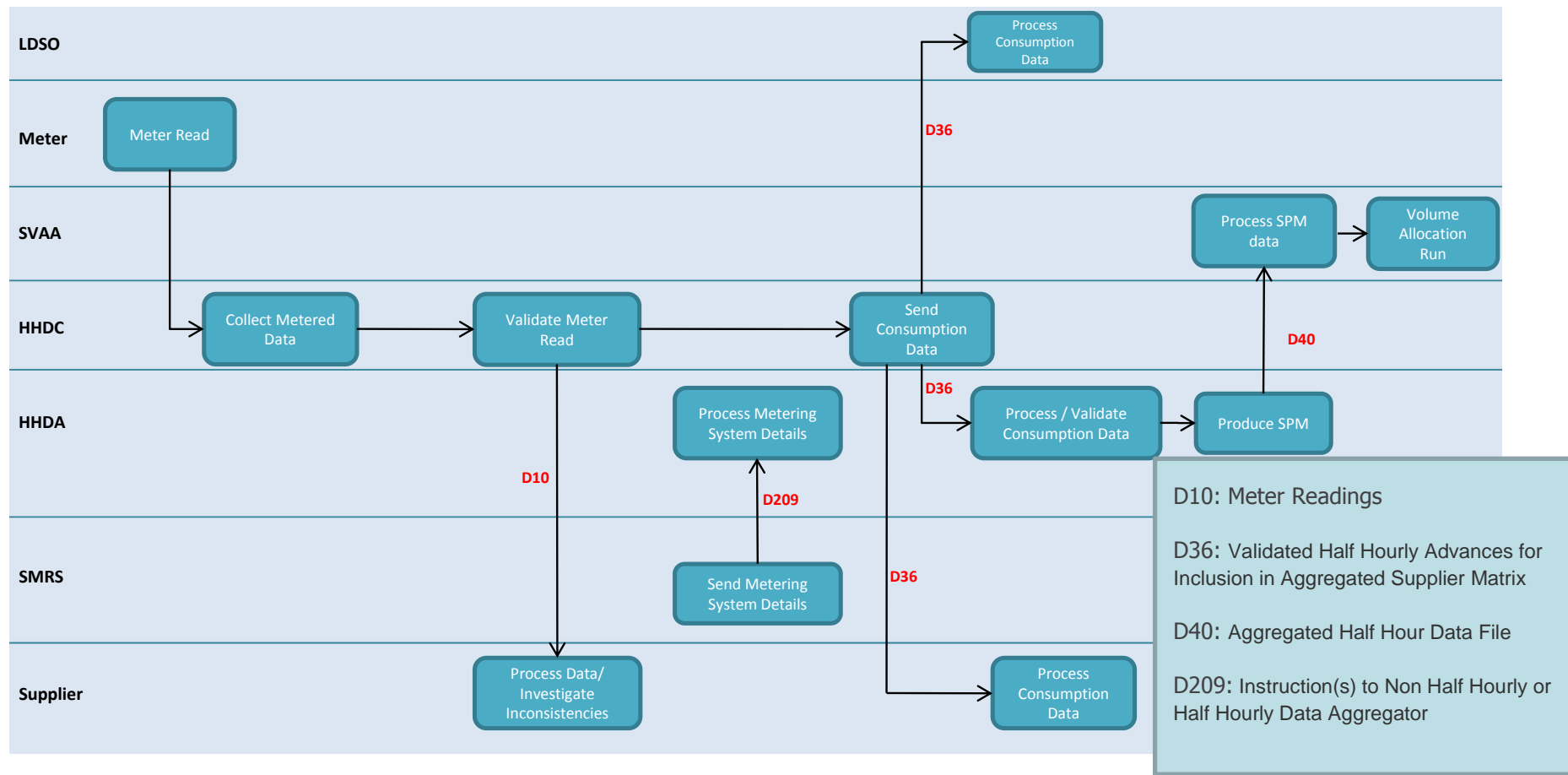
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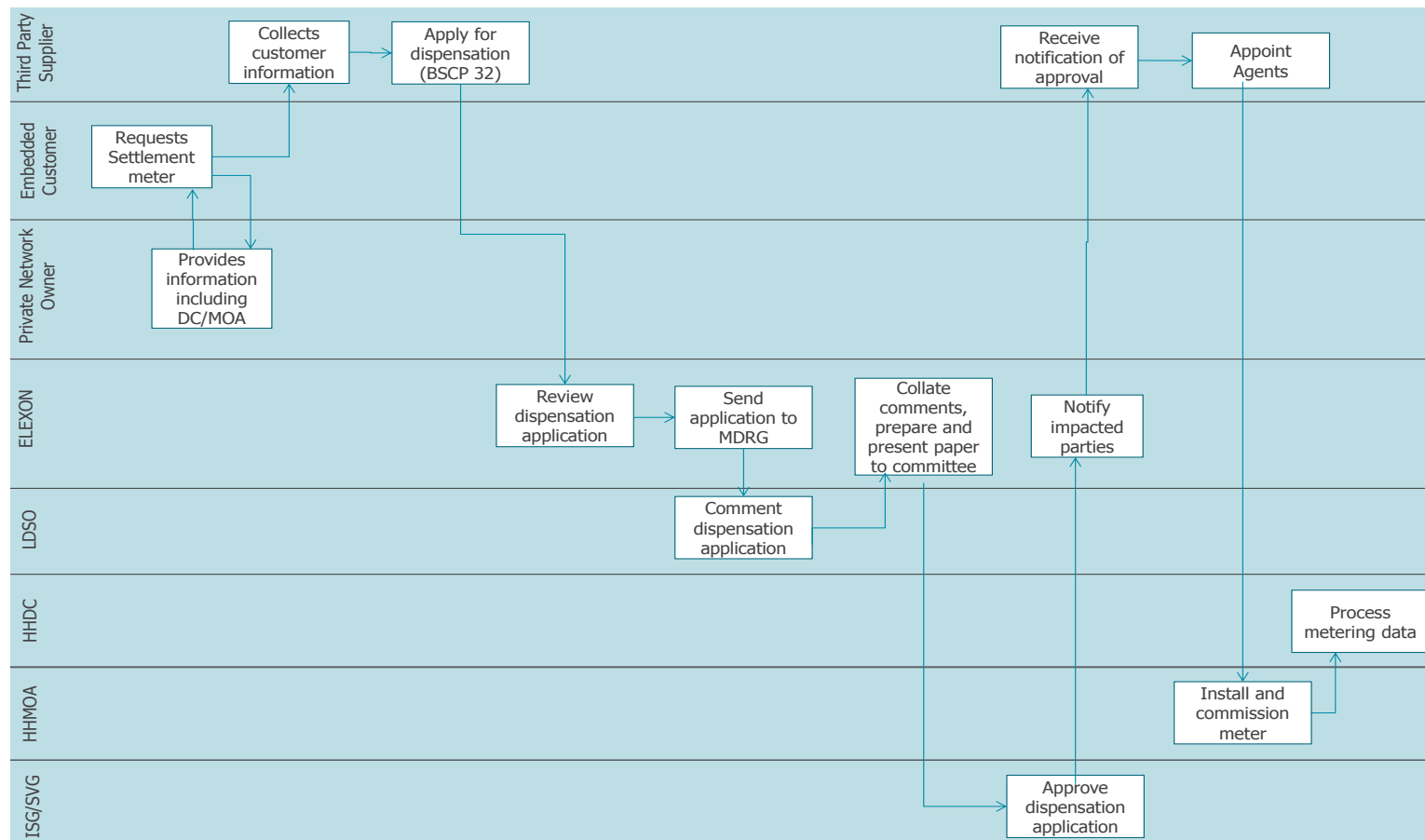
Appendix 1 - HH meter to SVAA





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Appendix 2 – Metering Dispensation 'As-Is' Process



Note: We only notify the applicant and TAA if a Dispensation is approved or the applicant only if it is rejected.