

BSC SANDBOX RISK ASSESSMENT FOR GOOD ENERGY

An assessment of the risks
to Settlement of the BSC
derogation requested by
Good Energy

Public

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Good Energy Proposal

Good Energy have raised a BSC Sandbox request for a derogation against the BSC provisions preventing them from appointing different Supplier Agents for Import / Export Half Hourly Metering Systems where DCC enabled Smart Meters are installed. This will allow them to remove a barrier preventing the use of Export Metering System IDs (MSIDs) for small-scale micro generation.

Section J 4.1.5 states that where same SVA Metering Equipment at a Third Party Generating Plant measures both Import and Export Energy then, the Supplier responsible for the Export MSID shall ensure that the same SVA Meter Operator Agent (MOA) is appointed to the Export MSID as is appointed to the Import MSID.

Section J 4.1.6 also requires that where the same Outstation(s) is used at a Third Party Generating Plant to transfer both Import and Export Energy for Settlement purposes then the Supplier responsible for the Export MSID shall ensure that the same Data Collector (DC) is appointed to the Export MSID as is appointed to the Import MSID.

Good Energy have stated in their application that complying with the aforementioned Section J requirements presents a large and unnecessary administrative burden on Suppliers, resulting in Export Suppliers having to negotiate and secure contracts with the third-party agents of each of their customers' Import Supplier.

Good Energy have stated that the success criteria for this trial will be:

- Successfully register new Export MSIDs for the export registers of smart meters in bulk
- Register export MPANs in the industry singularly and in bulk
- Collect export register Meter reads via the DCC
- Convert FIT customers from Deemed FIT payments to actual FIT payments
- Identify when Meter exchanges occur and retrieve Meter details from DCC/ECOES
- Ability to maintain accurate Meter details with appointed MOP via workaround

The applicant has stated that they do not believe these success criteria can be met under the current requirement to appoint the same Supplier Agents across shared Metering Equipment

Good Energy have requested a two year derogation from the requirements detailed in Section J, which will provide the time required to assess the outputs of the trial and allow for in trial activities to take place on the Meters and MSIDs under the derogation. This is the maximum time period for which a Sandbox trial can run (excluding an allowable one year "transition period to allow progression of a subsequent Modification).

Potential risks

Elxon have identified and considered the following potential risks when assessing this application.

1. Meter Operation

- 1.1 Elxon consider that the key risks to Settlement of using different MOAs across Import and Export MSIDs are as follows:
 - a) The risk that both MOAs carry out metering activities (fault rectification, Meter exchanges) on a Meter under single ownership.
 - b) The risk that metering activities, once carried out by one MOA, are not communicated to the Import/Export Supplier, the corresponding MOA, or any other relevant Party.
- 1.2 Good Energy have stated that their appointed MOA (responsible for the Export MSID) will not be responsible or asked to carry out physical metering activities; essentially being a "dummy" MOA appointment. This mitigates against the risk that the appointed Export MOA responds to any request for a Meter exchange or fault rectification; carrying out metering activities on assets when they do not have the authority to do so.

- 1.3 Good Energy are proposing to conduct daily checks on the Electricity Enquiry Service¹ (EES) and use daily data download checks from the DCC to check for any updates to the Meter or Meter setup. This will allow Good Energy to proactively recognise any changes to the asset and chase for relevant updates. Elexon do have a concern that this is a largely manual process and very resource intensive to conduct on a 100,000 Metering Systems. If a Modification is to be raised following (or within) this trial, it is likely that an enduring solution would require a formalised process for the MOA responsible for conducting metering activities to transfer MTDs to the corresponding MOA and the Supplier for which they are not the appointed MOA.
- 1.4 However Elexon recognise that the creation of this formalised process is not possible within the scope of this derogation given that it would likely require changes to data flows and both BSCPs and REC Schedules. Given that DCC adopted SMETS Meters are not “configured” (tariff and register data is set by Service Requests via the DCC) and only the Import Supplier can amend the Import registers (and vice versa for the Export registers) there is a low possibility of updates to the Meter Technical Details (MTDs) being required for anything other than a Meter exchange. This mitigates the risk that changes to MTDs are not transferred to all relevant parties.

2. Data Collection

- 2.1 Many of the key risks associated with appointing different DCs across Import/Export Metering Systems that apply to traditional Advanced and Half Hourly Meters do not apply to DCC adopted SMETS Meters.
- 2.2 One risk is that where two different DCs are attempting to retrieve data from the same Outstation. If these requests are sent at the same time, then one or both of these requests could fail or even cause issues with the Meter itself. For DCC adopted SMETS Meters, data retrieval is carried out via Service Requests on the DCC. The DCC will “queue” Service Requests that it receives at the same time and ensures both requests are carried out in full without causing issue to the Meter. Which Service Request is processed first will have no impact on Settlement.
- 2.3 A further risk that is prevalent in the Advanced Meter population is both DCs attempting to carry out time resets on the Outstation that they are appointed to. Within a certain tolerance (as defined by the relevant CoP) the appointed DC for an Advanced Meter can reset the time of the Meter using the clock embedded within their “head-end data retrieval system”. If these systems are not set to the same time then there is a risk that the Outstation could be constantly set to different times which will affect the accuracy of the data retrieved for Settlement. For DCC adopted SMETS Meters the time of the electricity Meter is set from the Comms Hub which is aligned with the clock embedded within the DCC itself. Therefore the risk of time resets coming from different clock set ups is automatically mitigated.
- 2.4 Whilst not necessarily a Settlement Risk, Elexon do have a concern around data protection with having different appointed DCs across Import/Export MSIDs. Half Hourly (HH) Data is considered personal data. For Domestic and microbusiness end users the customer has to give consent for the Supplier to access HH data. The Import Supplier (and by extension it’s appointed Supplier Agents) should only have access to the Import related Settlement energy values (and vice versa for the Export Supplier). Where each Supplier is retrieving HH data themselves through flow direction specific Service Requests then this will not be an issue as each Supplier only has authority to send Service Requests related to the flow direction they are responsible for (Import/Export). However where a DC is offering a managed service to the Supplier for data retrieval, and they are using the DCC role of “Other User” to retrieve this data, this limitation may not be set in the DCC. This would mean that a DC that is only representing one Supplier could have access to both Import and Export data. Elexon are currently enquiring with DCC and SECAS to determine if this is a data protection issue as the security rules around the Other User role are not fully known within Elexon

¹ Formerly ECOES

Scale of risks

Good Energy are proposing to scale their trial over the two year derogation commencing with 100 MSIDs in October 2022 and concluding with 100,000 MSIDs. The full plan is detailed below:

	Roll Out (per month)	Roll Out (Accumulative)
Oct-22	100	100
Nov-22	1,000	1,100
Dec-22	5,000	6,100
Jan-23	10,000	16,100
Feb-23	15,000	31,100
Mar-23	15,000	46,100
Apr-23	17,000	63,100
May-23	17,000	80,100
Jun-23	19,900	100,000

The proposed scale of the trial is much larger than previous Sandbox applications. The larger the scale of the trial, the greater the risk to Settlement should an issue occur. Also given the manual nature of Good Energy's proposal to track changes to the Metering Equipment (manual checks through EES and DCC) the risk of not capturing a change to the Metering Equipment grows as the trial is scaled up given the increase in administrative effort.

Elexon have raised this concern with Good Energy. It is expected that due to the nature of DCC adopted SMETS, there will not a large amount of metering activity taking place across the derogation portfolio. Good Energy therefore, feel the numbers quoted for the trial are essential to gather enough data to deem the trial a success and achieve the desired success outcomes.

Given the significant amount of MSIDs proposed to be involved in the trial, Elexon would recommend that acceptance criteria is set as a "gate" that must be met before progression to certain stages within the trial (every 3 months from commencement as an example). We would also recommend that the scaling up of the trail is spread out more over the two year period of the derogation.

Risk in respect of enduring implementation

Good Energy have stated they are proposing to raise a BSC Modification to change the requirements in Section J to allow for different Supplier Agents to be appointed across Import and Export MSIDs utilising shared Metering Equipment. They are planning to raise this Modification following completion of one year of the trial whilst also requesting an extension of a further year to the derogation to allow time for the Modification to progress and be approved in time to negate the need to reset all MSIDs within the trial to be reset to a compliant state.

As previously stated, the main difference between the proposed trial and the enduring solution foreseen by Elexon is that a formalised process will be required under the Data Specification for the transfer of MTDs related to the MSID to

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all relevant parties. Whilst this trial will aim to prove that the manual checking of EES and DCC data will mitigate the risk of non-transfer of metering data for a small to medium population of MSIDs, Elexon do not feel that this is the optimal solution when scaled up for use with the wider industry.

Disruption to normal BSC Operation

Elexon note that this trial will have a downstream impact on all Import Suppliers (and their Supplier Agents) associated with the Metering Equipment for which Good Energy are the appointed Export Supplier.

Elexon initially recommended that the MSIDs involved in the trial were limited to a certain number of Import Suppliers and Supplier Agents.

Good Energy stated that the derogation has been designed to allow for the success criteria of the trial to be met regardless of the Import Supplier and their Supplier Agents. Good Energy also stated their concern that to limit the trial to certain Import Suppliers would require them to be aware of who that Supplier was and be in contact with each of these Suppliers. This is an administrative burden that the trial is seeking to negate. Good Energy also noted that they would have no control over any Change of Supplier or Change of Agent that the Import MSID may go through. This would make it challenging to control the identity of the Import Suppliers involved. For these reasons they are not proposing to limit the Import Suppliers involved.

Assessment against Risk Evaluation Register

The Risk Evaluation Register² (RER) provides an overview of the Settlement Risks monitored by Elexon Performance Assurance function. It is important that any BSC Sandbox application is assessed against each of the risks present in the RER. The assessment uses a Red, Amber, Green (RAG) assessment, where Red indicates that a risk is negatively impacted by the trial and requires mitigation, Amber indicates that a risk is neutrally affected by the trial, Green indicates that a risk is reduced by the trial and White indicates that a risk is not affected by the trial.

Id Number	Risk Title - The risk that...	RAG	Commentary
001	SVA Metering Point is registered incorrectly or not at all, such that metered data is not collected or aggregated	R	The Supplier/MOA appointed to the Export MSID may not have knowledge of the attributes associated with the Metering Equipment associated with that MSID. This may cause delays or errors in the registration of the Export MSID.
002	SVA Metering System attributes held in the Supplier Meter Registration Service (SMRS) or by any party in the Supplier Hub are incorrect	A	The Import Supplier/MOA will be responsible for updating any metering attributes held in SMRS following registration. Therefore this derogation should not negatively impact the Metering System attributes held in SMRS.
003	SVA Metering Equipment is installed, programmed or maintained incorrectly including where Commissioning is performed incorrectly or not at all	A	The trial does not propose to make any changes to the way that SVA Metering Equipment is installed, programmed or maintained.
004	Changes to SVA Metering Equipment are not notified, such that all members of the Supplier Hub do not use the current Meter Technical Details	R	There is a risk that the Import Supplier/MOA makes changes to the SVA Metering Equipment that Good Energy do not recognise, meaning that the Meter Technical details for the Import and Export MSIDs become unaligned.

² <https://www.elexon.co.uk/reference/performance-assurance/performance-assurance-processes/performance-assurance-risk-evaluation-register/>

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005	A fault with SVA Metering Equipment is not resolved, such that metered data is recorded incorrectly or cannot be retrieved	R	There is a risk that the Import Supplier/MOA make changes to the Metering Equipment following a fault rectification that is not recognised by Good Energy.
006	On a change of agent, Meter Technical Details are not transferred or processed correctly or at all, such that parties do not use the latest Meter Technical Details	A	The trial has been designed so that the appointed agents for the Import MSID do not impact the Export MSID, nor it's Supplier/Supplier Agents. A Change of Agent for the Import MSID should not negatively impact Settlement.
007	SVA Metered data is not retrieved, such that the proportion of estimated data being used in Settlement contributes to performance standards not being met	R	There is a risk that changes to the Metering Equipment made by the Import Supplier/MOA are not recognised by Good Energy, resulting in Good Energy not being able to retrieve data from the Meter.
008	SVA metered data is not processed or transferred correctly, or at all	W	The trial does not propose to make any change to SVA Metered data processing.
009	The Data Aggregator does not process metered data correctly or at all, including transfer to SVAA, such that the energy volumes required for Settlement are incorrect or missing	W	The Trial does not propose to make any changes to the Data Aggregation process.
010	On change of Data Collector, meter read history is incorrect or not transferred such that sufficient history is not available for validating and estimating energy volumes	A	The trial has been designed so that the appointed agents for the Import MSID do not impact the Export MSID, nor it's Supplier/Supplier Agents. A Change of Agent for the Import MSID should not negatively impact Settlement.
011	Unmetered Supplies volumes are calculated incorrectly or not at all	W	UMS – Not applicable
012	SVA Metering System technical details are created incorrectly	A	The Import MOA will be responsible for the creation of the MTDs related to the associated Metering Equipment. Therefore this trial should not negatively impact the creation of MTDs.
013	Manual adjustments to Metered Data are not completed correctly, or at all	W	The trial does not propose to make any changes to manual adjustments of Metered Data.
014	Agents are not appointed or de-appointed correctly, such that SMRS is not complete or up to date, members of the Supplier Hub do not hold the correct MPID of other Hub members or the appropriate agents are not appointed	A	The trial has been designed so that the appointed agents for the Import MSID do not impact the Export MSID, nor it's Supplier/Supplier Agents therefore this derogation should not negatively impact the appointment process.
015	SVA reference data is not created or transferred correctly, or at all	W	The trial does not propose to make any changes to the SVA reference data processes, nor is it more likely to cause problems with that process.
016	The energisation status held in SMRS or by any party in the Supplier Hub does not match the physical energisation status of the SVA Metering System	A	The Import Supplier/MOA will be responsible for any changes to the energisation status and updating SMRS. Therefore this trial should not impact the energisation status as held in SMRS.
017	Exception reports are not sufficiently managed, such that material exceptions are not addressed at all or in a timely manner	W	The trial does not propose to make any changes to the exception reporting process,

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			nor is it more likely to cause problems with that process.
018	Revenue protection processes are not managed sufficiently, such that unrecorded energy volumes are excluded from Settlement	W	The trial does not propose to make any changes to revenue protection processes, nor is it more likely to cause problems with those processes.
019	A Volume Allocation Unit is registered incorrectly or not at all, such that the CDCA does not collect any or the relevant data	W	CVA – Not applicable
020	CVA Metering Equipment is installed, programmed or maintained incorrectly including where Commissioning is performed incorrectly or not at all	W	CVA – Not applicable
021	CVA Metered Data is not retrieved, or processed correctly, or at all, by the CDCA	W	CVA – Not applicable
022	Changes to CVA Metering Equipment are not notified to CDCA	W	CVA – Not applicable
023	A fault with CVA Metering Equipment is not resolved, such that Metered Data is recorded incorrectly or cannot be retrieved	W	CVA – Not applicable
024	CVA reference data is not created or transferred correctly, or at all	W	CVA – Not applicable
025	Balancing Services provided by Virtual Lead Parties allow error to enter Settlement, such that the energy volumes required for Settlement are incorrect or missing	W	Not Applicable
026	Aggregation Rules in CDCA are incorrect such that CVA Metered Data is not correctly aggregated and the energy volumes required for Settlement are incorrect or missing	W	CVA – Not applicable
027	Trading Parties do not or are unable to pay Trading Charges fully or at all, such that it triggers an Event of Default	W	Not applicable
028	NETSO does not submit or submits incorrect Settlement data	W	NETSO – Not applicable
029	The SAA's calculations and processing are incorrect or use incorrect data	W	BSC Agent – Not applicable
A030	The ECVA does not carry out processes correctly, such that output files are inaccurate	W	BSC Agent – Not applicable
031	The FAA does not accurately process Trading Charges or calculate ad-hoc charges correctly, such that Advice Notes are incorrect	W	BSC Agent – Not applicable
032	Manual adjustments to CVA Metered Data are not completed correctly, or at all	W	CVA – Not applicable
033	An Interconnector Administrator does not submit, or submits inaccurate BM Unit Metered Volume data	W	IA – Not applicable
034	The SVAA does not process or transfer the correct data or does not use approved default data.	W	BSC Agent – Not applicable

Performance Assurance Board Views

Elexon presented the Risk Assessment for the Good Energy Sandbox to the BSC Performance Assurance Board (PAB) for comment at their meeting on 28 July 2022.

PAB noted the risks identified by Elexon. A PAB member raised the question of whether it was possible that a metering fault could occur on the Export registers only, leading to a fault being raised to the Export Supplier (Good Energy) and by extension the Export Supplier's appointed MOA. As Good Energy have stated that their appointed MOA will not be contracted to attend site and conduct works on the Metering Equipment, an "Export only" risk may not be rectified.

Good Energy do not foresee any scenario in which a fault could occur on a DCC adopted SMETS Meter that would impact the Export Metering System but not the Import Metering System. Elexon agree with this assumption. However PAB's concerns has been noted and the trial will look to prove this assumption. Should an "Export only" fault occur within the trial this would mean Good Energy would need to reconsider their proposed solution to ensure that this scenario could be dealt with quickly and efficiently.