

Stage 03: Assessment Procedure Consultation

P302 'Improving the Change of Supplier Meter read process for smart Meters'

This Modification proposes to amend the change of Supplier process to make use of the enhanced functionality that smart Meters will provide.

The Modification takes forward the discussions and suggested way forward considered under Issue 53.

This Assessment Procedure Consultation for P302 closes:

5pm on Friday 8 August 2014

The Workgroup may not be able to consider late responses.



The P302 Workgroup initially recommends **approval** of P302

This Modification is expected to impact:

- Suppliers
- Non Half Hourly Data Collectors (NHHDCs)
- Non Half Hourly Meter Operator Agents (NHHMOAs)
- Licensed Distribution System Operator (LDSOs)

What stage is this document in the process?

- 01 Initial Written Assessment
- 02 Definition Procedure
- 03 Assessment Procedure
- 04 Report Phase



Any questions?

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About This Document

The purpose of this P302 Assessment Procedure Consultation is to invite BSC Parties and other interested parties to provide their views on the merits or otherwise of P302. The P302 Workgroup will then discuss the consultation responses, before making a recommendation to the BSC Panel at its meeting on 11 September 2014 on whether or not to approve P302.

There are three parts to this document:

- This is the main document. It provides details of the solution, impacts, costs, benefits/drawbacks and proposed implementation approach. It also summarises the Workgroup's key views on the areas set by the Panel in its Terms of Reference, and contains details of the Workgroup's membership and full Terms of Reference.
- Attachment A contains the draft redlined changes to the BSC for P302.
- Attachment B contains the specific questions on which the Workgroup seeks your views. Please use this form to provide your response to these questions and to record any further views or comments you wish the Workgroup to consider.

P302
Assessment Procedure
Consultation

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Version 1.0

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Why Change?

A Modification is required to put in place the necessary BSC and BSC Procedure (BSCP) changes to support the change of Supply (CoS) read process for a Data and Communications Company (DCC) serviced smart Metering System. It also seeks to reduce the dependencies between the two Supplier hubs involved in a CoS event.

Solution

P302 proposes to amend the CoS process to make use of the enhanced functionality that DCC serviced smart Meters will provide and improve the passing of timely and accurate consumption data into Settlement.

The proposed solution will require both the old and new Supplier to collect total cumulative and time of use Meter register readings via the DCC, and where this is not possible it sets out the timescales and processes for initiating the legacy CoS process.

Under a potential alternative solution, one Supplier would lead on the collection of the readings.

Impacts & Costs

P302 will impact all Suppliers, Non Half Hourly (NHH) Data Collectors (NHHDCs) and NHH Meter Operator Agents (NHHMOAs), which will need to amend systems and processes associated with the CoS process. It may also impact Licensed Distribution System Operators (LDSOs), depending upon whether the new or old NHHDCs, or both send the D0086 'Notification of Change of Supplier Readings' data flow to them.

Implementation

The P302 Workgroup is recommending implementation on 25 February 2016 as part of the February 2016 release, subject to the Authority's decision being received on or before 24 February 2015. This is to allow participants at least 12 months lead time to implement the changes to their systems and processes.

Recommendation

The P302 Workgroup unanimously believes that P302 would better facilitate Applicable BSC Objective (c). A majority also felt that it better facilitated Applicable BSC Objective (d). The Workgroup therefore initially recommends approval of P302.

What is the change of Supplier process?

In order to establish the respective Settlement and customer billing liabilities on a CoS, Meter readings must be obtained on (or close to) the date and time when the new Supplier takes over responsibility for the customer's electricity supply.

The old Supplier needs a final read(s) from which they will close the account and provide a final bill to the customer for energy consumption up to the point that the electricity supply switches to the new Supplier. An opening read(s) by the customer's chosen new Supplier is used as a starting point for electricity consumption going forward. The opening and closing reads should be taken as near as possible so that all energy is accounted for in Settlement and on the customer's bill. These opening and closing reads will usually be the same.

From a BSC perspective these CoS Meter reads are used in Settlement to ensure that metered consumption or export for NHH Metering Systems is allocated accurately to the respective Suppliers.

What is the current process?

Under the current NHH CoS process, the NHHDC appointed by the new Supplier is responsible for determining the CoS reading for the Supply Start Date¹ (SSD) on behalf of both the new and old Suppliers.

In the situation where the new Supplier's NHHDC and NHHMOA are different to those appointed by the old Supplier, the old NHHMOA transfers the Meter Technical Details (MTDs) to the new NHHDC via the new NHHMOA. This transfer of MTDs is required so the new NHHDC can interpret the Meter readings obtained from a customer's Meter correctly.

The old NHHDC transfers a Meter reading and Estimated Annual Consumption (EAC) to the new NHHDC to allow the new NHHDC to validate the CoS readings. The provision of this information by the old NHHDC also enables the new NHHDC to deem a reading in the event that valid actual readings are unavailable and to provide the EAC to the new NHH Data Aggregator (NHHDA) for use until the first Annualised Advance (AA) has been calculated.

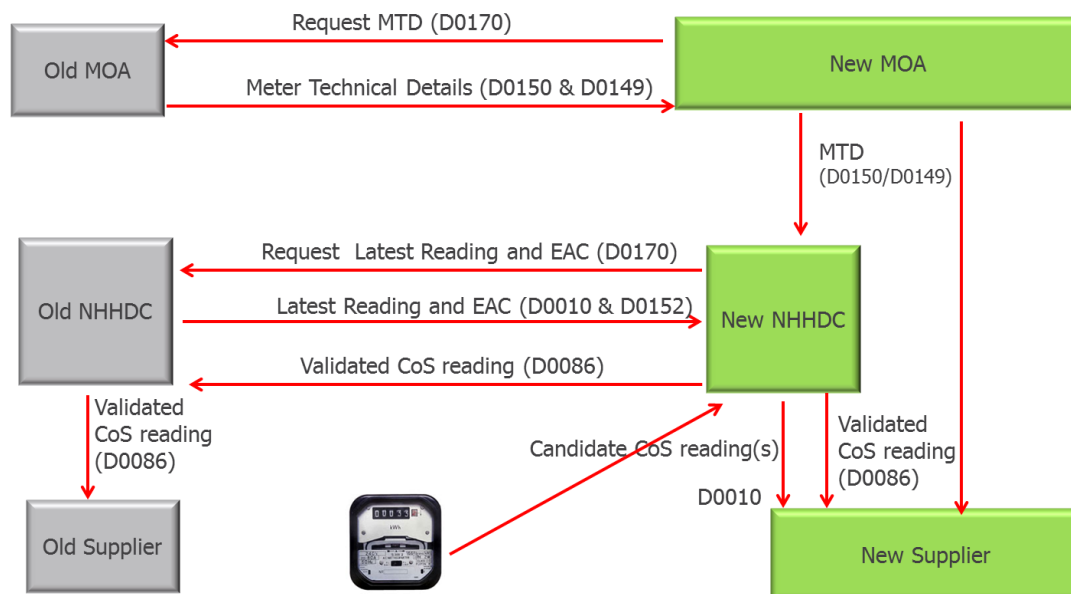
The transfer of MTDs, EACs and Meter readings between the old and new Supplier Agents is dependent on:

- the new Supplier appointing new Supplier Agents;
- the new agents being notified of each other's identities and of the relevant old agents' identities by the new Supplier; and
- the relevant data flow requests being sent.

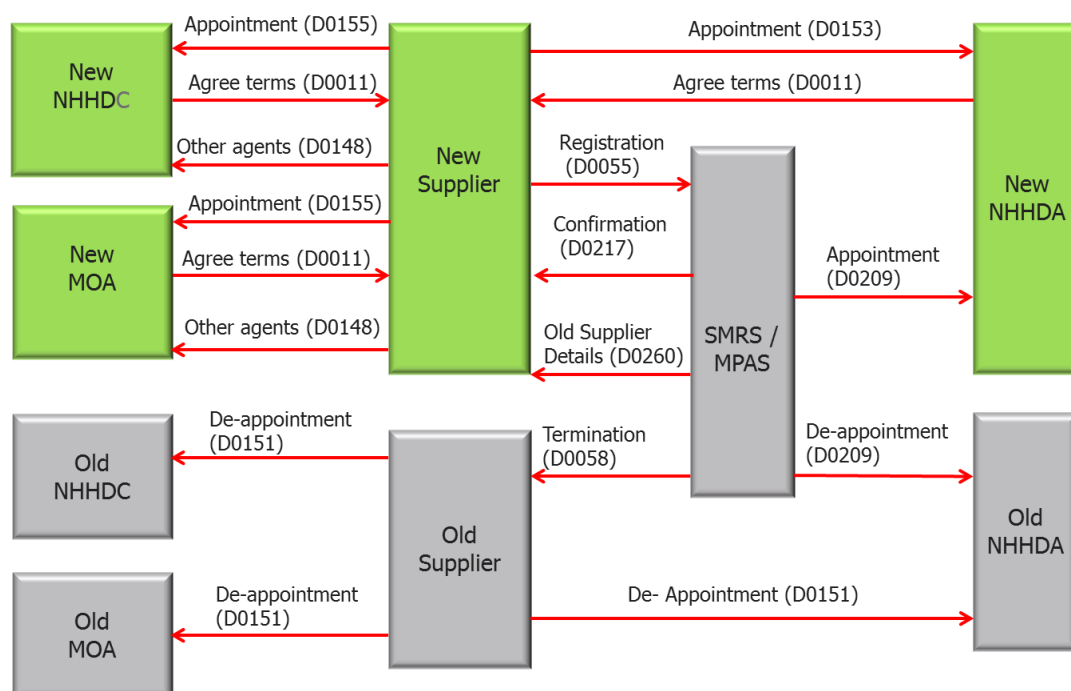
The following two diagrams summarise the current CoS process and the agent appointment and de-appointment processes. The current CoS read process has direct links and dependencies on the agent appointment process.

¹ A new SSD is the point at which a new Supplier starts providing electricity to a customer. This commences at midnight on the day that the Supplier starts providing electricity to that customer. Currently the CoS read used on SSD is derived from candidate reads taken between SSD \pm 5 Working Days (WDs). Once the CoS reading is confirmed this is then dated as the read on the SSD.

Current CoS process²



Supplier Agent appointment/de-appointment process



A list of the data flows referenced in these diagrams can be found in Appendix 1.

The current CoS reading process is complicated and is dependent on multiple data flows. As a result the current process is lengthy and prone to error in the instances when these data flows are not sent or cannot be processed by the recipient. Delays and failures in the process can result in inaccurate data, impacting both Settlement and customer billing. The

² Please note that the CoS process diagram shows a simplified version of the process in its current form. Approved CP1395 'Distribution of Configuration Details for Smart Meters' will modify this process when it takes effect on 26 February 2015 as part of the February 2015 Release. The changes will take into account the presence of the DCC, and if a customer has a smart DCC serviced smart Meter the Supplier will obtain a CoS read rather than the new NHHDC. This will be achieved by sending a request to the smart Meter via the DCC.

costs of resolving these delays and failures are borne by Suppliers, agents and ultimately consumers.

Previous work on a smart CoS read process

In July 2012, Ofgem set out its intention to improve the CoS process by making use of the benefits that smart Meters will provide. Ofgem's ambition is for a fast, reliable and cost-effective process that facilitates Supplier competition and builds consumer confidence. Simultaneously, it is important that any reforms maintain or improve the accuracy of Settlement.

Smart Meters are already being rolled out to homes and small businesses, with the large scale roll-out planned to begin in December 2015. The current expectation is that the smart Meter roll-out will be completed by 2020.

To support the 'smart' functionality of these Meters, the DCC has been created. The DCC has responsibility for enabling Suppliers to communicate with smart Meters in homes and small businesses. The presence of the DCC should make it easier for Suppliers to access Meter reads remotely and more quickly. This in turn should aid the accuracy of Settlement, as more actual Meter readings will be available. In addition the customer experience should improve as readings needed on instances such as a CoS will be more readily available. Such improvements would only be fully realised if amendments were made to the existing CoS processes to make use of the functionality of smart Meters and the DCC.

Ofgem and the Change of Supplier Expert Group

Ofgem has been engaging with a range of industry participants and undertaken research into making use of smart metering to improve the CoS processes and the customer experience. Part of this has been achieved through discussions at the Change of Supplier Expert Group (COSEG) and supporting sub-groups.

On 6 December 2013 Ofgem issued an [open letter](#)³ welcoming a participant to raise a BSC Issue, to consider what changes should be made to the process by which CoS Meter reads are obtained and processed for smart electricity Meters. Part of this Issue would be consideration of the reform proposals developed at the Ofgem led COSEG meetings.

Issue 53

On 9 December 2013, EDF Energy raised [Issue 53 'Reforming the Change of Supplier Meter read process for smart electricity Meters'](#).

The Issue 53 Group considered the high level solution, discussed at the Ofgem COSEG meetings and expanded on the detail of the solution. The Issue 53 report covering full details and outcomes of the Issue 53 Group discussions was provided to the BSC Panel on 20 March 2014.

³ 'Open letter on reforming the change of supplier (CoS) Meter read process for smart electricity Meters'

What is the issue?

One of the conclusions of the Issue 53 discussions was that a Modification was required to put in place the necessary BSC and BSCP changes to support a DCC serviced smart Meter CoS read process. This Modification has been raised to progress these changes and seeks to reduce the dependencies between the two Supplier hubs involved in a CoS event.

Proposed solution

The proposed solution seeks to take forward the DCC service smart Meter CoS process discussed under Issue 53. The proposed solution will only apply to smart Meters that are serviced by the DCC.

What is the process?

On a CoS event the old Supplier will take a final (closing) reading(s) by obtaining a reading(s) from the smart Meter's 'Daily Read Log' on the SSD. The old Supplier will then send the total cumulative readings to its NHHDC (the old NHHDC) for validation.

As part of obtaining the final readings, the old Supplier will collect total cumulative and time of use Meter register readings from the smart Meter on the SSD (again from the Daily Read Log). This is for use in the event of a disputed CoS read between the old Supplier and the customer (or between the two Suppliers).

While it is envisaged that the old Supplier will obtain the closing read on the SSD they will be able to obtain the SSD readings from the Daily Read Log for up to 31 calendar days after the CoS event, before the entry in the rolling log is overwritten.

The new Supplier will take an opening read for each of the relevant time of use registers it will be using, following any re-configuration of the Meter by the Supplier. As per the old Supplier, the new Supplier will take a total cumulative reading from the Daily Read Log on the SSD, in case of disputed reads between the new Supplier and the customer (or between the two Suppliers). It is assumed that this will be close to midnight on SSD, though this may not always be possible.

The old Supplier will send the D0311 'Notification of Old Supplier Information' data flow to the new Supplier. This will contain the total cumulative reading obtained by, and any of the time of use registers used by, the old Supplier. The new Supplier will check its read(s) against the D0311 data flow to ensure that the customer is not under or overbilled and data entering Settlement is correct. Where the reads do not match, or where it has not received the D0311 data flow with reads, the new Supplier will contact the old Supplier.



What is a 'Daily Read Log'?

A SMETS 2 smart Meter is required to maintain a Daily Read Log – a 31 day rolling record of midnight readings from various registers. These registers include the total cumulative register and each of the 48 time of use registers.



What is the 'total cumulative register'?

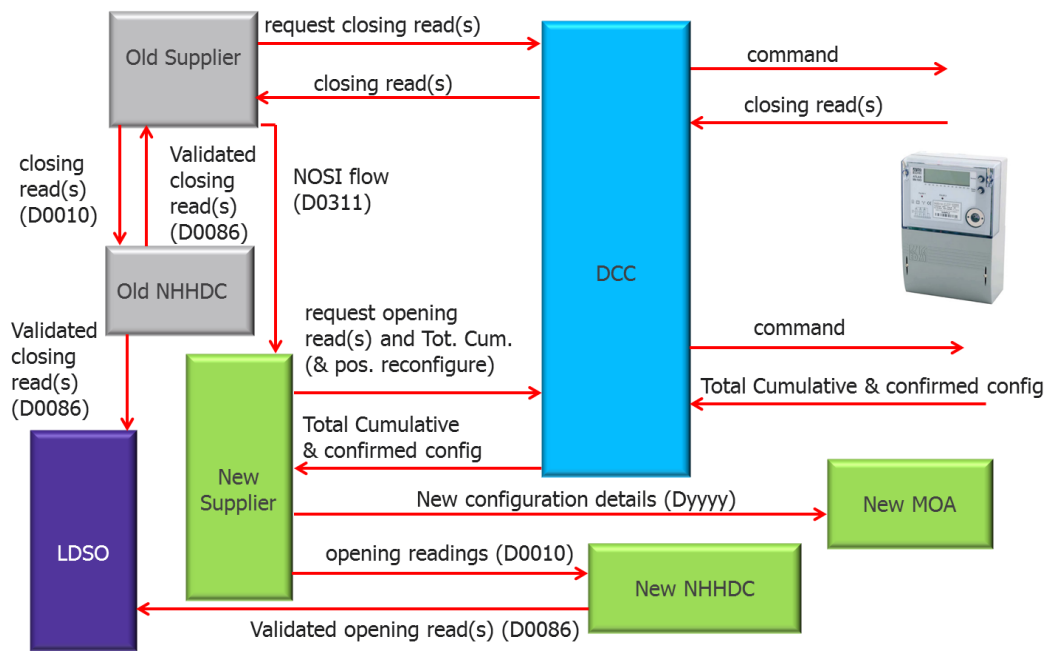
This is the record of total consumption over time, since the Meter was first installed. It is similar to the consumption measured on a 'dumb' single rate Meter.



What are 'time of use registers'?

A SMETS 2 smart Meter has 48 time of use registers, which can be used by a Supplier to measure consumption at different points during the day. This enables the Supplier to then apply consumption to the tariff agreed between the Supplier and customer.

The DCC serviced smart Meter CoS process can be summarised by the following diagram:



Legal text

To support the proposed smart Meter CoS Read process the following changes are required:

- Amendment to the deeming requirements in Section S Annex S-2 4.3.13 so that for DCC serviced smart Meters the new Supplier will provide its initial EAC to its NHHDC, which will use that unless it has requested and received the previous EAC from the old Supplier's NHHDC within SSD+4 Working Days. (You can find this in Attachment A).
- Amendment to BSCP504 'Non-Half Hourly Data Collection for SVA Metering Systems Registered in SMRS' and BSCP514 'SVA Meter Operations for Metering Systems Registered in SMRS' as appropriate to capture the proposed CoS read process changes:
 - The old and new Supplier will obtain the SSD read for their opening and closing CoS readings from the smart Meter. This does not necessarily need to be carried out at the same point in time, but must be completed. The reads must be passed to their respective Suppliers' NHHDCs for validation and used in the creation of AAs for Settlement purposes. The Meter readings sent to the NHHDCs will be sent on the D0010 data flow. The NHHDCs will then send the D0086 data flows by SSD+8 Working Days.
 - The old Supplier will send the D0311 data flow to advise the new Supplier of the total cumulative reading it has obtained and any time of use registers it uses. This will also include the latest EAC. If the old Supplier is unable to obtain the read, it should inform the new Supplier and still send the D0311 data flow with the EAC. If the new Supplier does not receive a D0311 data flow, if it requires it then it may contact the old Supplier.
 - Should the old Supplier inform the new Supplier that it could not retrieve the Meter reading(s) and is also unable to obtain the Meter readings from the 'Daily Read Log' up to SSD+4 Working Days, then it will initiate the legacy CoS processes.

- If the old Supplier was unable to retrieve a Meter reading and therefore sent only an EAC to the new Supplier, but the new Supplier was able to obtain the Meter reading, then the new Supplier will inform the old Supplier and provide the Daily Read Log it has retrieved. The old Supplier may then choose to either use the new Supplier's Daily Read Log or try to retrieve the reading itself.
- The new Supplier will confirm the configuration of a smart Meter on a CoS and pass the Standard Settlement Configuration (SSC) and Meter register configuration to its NHHMOA, which will send these on to the new NHHDC.
- The new Supplier will notify its NHHDC and NHHMOA of whether the Meter is a smart Meter and whether they need to follow the smart or non-smart CoS read process. This will be achieved through the use of the D0155 'Notification of Meter Operator or Data Collector Appointment and Terms' data flow, which will be amended to include the J1833 'DCC Service Flag' data item. Where the legacy CoS processes are used in the event that the new Supplier is unable to retrieve the Meter reading(s), a second D0155 data flow would be sent to communicate to the agents the use of the legacy CoS process; and again once access to the 'Daily Read Log' is achieved.

Assessment Consultation Question

Do you agree with the Workgroup that the draft legal text in Attachment A delivers the intention of P302?

Please provide your rationale.

The Workgroup invites you to give your views using the response form in Attachment B.

Potential alternative solution

The Workgroup considered an alternative solution, whereby one Supplier would be responsible for retrieving the midnight readings from the daily read log and passing these to the other Supplier. This could be either the old or the new Supplier. Under the UNC/SPAA change, that working group has proposed an additional option where by only one Supplier obtains the opening/closing read from the Meter, but the process is silent as to which Supplier does this. This was proposed to maintain the 'single read' process, but mitigate dependencies as much as possible by allowing whichever Supplier is quickest to obtain the read.

If the new Supplier takes the read and sends this to the old Supplier, the Workgroup believes that this activity should be completed by SSD+1 Working Day.

If the old Supplier takes the read, the read information would be sent to the new Supplier once it has validated it. This should be done within SDD+4 Working Days.

The Workgroup did not recommend an alternative solution over the proposed. However, it agreed that these two variants should be included in the Assessment Consultation for respondents to comment on.

Assessment Consultation Questions

What are your views on the potential Alternative Modifications whereby one Supplier leads the smart CoS process?

Please provide your rationale as to whether it/they better facilitate the Applicable BSC Objectives.

Are there any other potential Alternative Modifications within the scope of P302, which would better facilitate the Applicable BSC Objectives?

Please provide your rationale and, if 'Yes', please provide full details of your Alternative Modification(s) and your rationale as to why it/they better facilitate the Applicable BSC Objectives.

The Workgroup invites you to give your views using the response form in Attachment B.

Risks to Settlement

P302 seeks to reduce the dependences between the old and new Supplier hubs. However, it does not do this at the expense of an unacceptable risk to Settlement (or to the detriment of the consumer). The P302 Workgroup would therefore like to understand whether the solution or potential solution would increase the associated risks to Settlement and whether there are any actions that could be taken to further mitigate the risk but ensure an efficient and timely CoS process.

Assessment Consultation Question

What are the potential risks to Settlement for the proposed solution and the alternative?

Please provide your rationale.

What controls do you believe should be put in place to mitigate any associated risks?

Please provide your rationale.

The Workgroup invites you to give your views using the response form in Attachment B.

4 Impacts & Costs

Estimated central implementation costs of P302

The estimated ELEXON effort to implement P302 equates to £240 (one man day). The ELEXON effort required is to update the relevant documents impacted by P302.

P302 impacts

P302 impacts on BSC Parties and Party Agents

| Impact on BSC Parties and Party Agents | |
|--|--|
| Party/Party Agent | Impact |
| Suppliers | Changes to the CoS Meter read process where a site has a DCC serviced smart Meter. |
| NHHDCs | |
| NHHMOAs | |
| LDSOs | Depending upon whether the new or old NHHDCs, or both send the D0086 data flow to the LDSO, these may need to amend systems and processes. |

Central impacts of P302 impacts

| Impact on Transmission Company | |
|--------------------------------|--|
| No impact. | |

| Impact on BSCCo | |
|-----------------|--------|
| Area of ELEXON | Impact |
| No impact. | |

| Impact on BSC Agents | |
|----------------------|--|
| No impact. | |

| Impact on BSC Systems and process | |
|-----------------------------------|--|
| No impact. | |

| Impact on Code | |
|---------------------|---|
| Code Section | Impact |
| Section S Annex S-2 | Changes to the requirements for calculating EACs. |

| Impact on Code Subsidiary Documents | |
|-------------------------------------|--|
| CSD | Impact |
| BSCP504 | Changes to capture the process steps and activities associated with the DCC serviced smart Meter CoS read process. |
| BSCP514 | |

P302 impacts on core industry documents

| Impact on Core Industry Documents and other documents | |
|---|---|
| Document | Impact |
| Master Registration Agreement | Changes will be needed to the DTC to take forward any necessary amendments to the D0155 data flow. Changes may be required to the MRA Disputed Read process. |

Specific questions on P302 impacts

The Workgroup have included specific questions to help it understand these impacts and the associated costs and lead times with implementing P302.

| Assessment Consultation Questions |
|--|
| <p>Will P302 impact your organisation?</p> <p><i>If 'Yes', please provide a description of the impact(s) and any activities which you will need to undertake between Ofgem's approval of P302 and the P302 Implementation Date (including any necessary changes to your systems, documents and processes). Where applicable, please state any difference in impacts between the Workgroup's proposed solutions.</i></p> |
| <p>Will your organisation incur any costs in implementing P302?</p> <p><i>If 'Yes', please provide details of these costs, how they arise and whether they are one-off or on-going costs. Please also state whether it makes any difference to these costs whether P302 is implemented as part of or outside of a normal BSC Systems Release. Where applicable, please state any difference in costs between the Workgroup's proposed solutions.</i></p> |
| <p>How long (from the point of Ofgem approval) would you need to implement P302?</p> <p><i>Please provide an explanation of your required lead time, and which of the activities listed in your previous answers on impacts are the key drivers behind the timescale. Please also state whether it makes any difference to this lead time whether P302 is implemented as part of or outside of a normal BSC Systems Release. Where applicable, please state any difference in lead times between the Workgroup's proposed solutions.</i></p> |
| <p>The Workgroup invites you to give your views using the response form in Attachment B.</p> |

5 Implementation

Recommended Implementation Date

The Workgroup recommends an Implementation Date for P302 of **25 February 2016** as part of the February 2016 release, if the Authority's decision is received on or before 24 February 2015.

The Workgroup considered the earliest Implementation Date for P302. It considered that due to the likely need for participants to make system changes, there would need to be at least 12 months lead time. As such, the Workgroup believed that it could be possible to implement the changes by December 2015 (the expected DCC go-live date). However, it believed that P302 should be implemented as part of a BSC Release on efficiency and economical grounds. Therefore, the Workgroup's initial recommendation is that P302 should be approved with an Implementation Date of 25 February 2016 as part of the February 2016 BSC Release. Nonetheless, a more complex interim process might be required and would have its own associated costs.

Assessment Consultation Question

Do you agree with the Workgroup's recommended Implementation Date?

Please provide your rationale.

The Workgroup invites you to give your views using the response form in Attachment B.

When will the final and opening reads be retrieved?

A Workgroup member asked whether the old and new Suppliers would obtain the Meter readings close to midnight. The Proposer clarified that the Meter will record the reading at midnight in the Daily Read Log, which both Suppliers could retrieve on SSD. The Workgroup understand that the new Supplier would only be able to access this once the DCC had updated the Meter's security credentials. However, it was later clarified that that obtaining Meter readings from a smart Meter is not dependent on getting the security credentials onto it and that these readings would be taken using the DCC's security credentials. The old Supplier will continue to have access to entries in the Daily Read Log which relate to its registration period. The Workgroup also noted that a Smart Metering Equipment Technical Specification (SMETS) 2 Meter will retain the data in the Daily Read Log for a minimum of 31 days, when the rolling log is then overwritten.

What version of SMETS should the solution cover?

The Workgroup considered whether the solution should be limited to SMETS2 (or higher version should these become available) or also open to SMETS1 Meters. The members believed that currently the DCC would not service SMETS1 Meters, but that this was under consideration. Therefore, the Workgroup agreed that the solution should be applied to any SMETS Meter that is serviced through the DCC. This is because the SMETS version becomes irrelevant information if a SMETS1 Meter could not be serviced by the DCC, and future-proofs the solution should that change. A Workgroup member noted that a SMETS1 Meter will have a Daily Read Log, albeit holding 14 rather than 31 calendar days' 'midnight reads'.

How will the Suppliers communicate when to use smart and legacy CoS?

The Workgroup discussed a number of communication scenarios, which included how it would be communicated that a Meter is a smart Meter (and which version of SMETS this is), whether it is serviced by the DCC and when to use the smart or legacy processes for CoS.

Communicating that a Metering System is smart

The Workgroup noted that the Supplier Meter Registration Agent (SMRA) would inform the new Supplier (using the D0217 'Confirmation of the Registration of a Metering Point' data flow) that the Metering System had a smart Meter (J1839 'SMETS Version' data item) and whether this was serviced by the DCC (J1833 data item). Under the proposed solution, the new Supplier would then send the D0155 data flow (which would be amended to include the J1833 data item) to the NHHMOA and NHHDC to inform them that the Metering System is a smart Meter and serviced by the DCC. The Workgroup noted that under approved Change Proposal [\(CP\) 1395 'Distribution of Configuration Details for Smart Meters'](#), which is to be implemented on 26 February 2015 as part of the February 2015 Release, the solution uses the contract reference to communicate whether the Metering System is smart. Therefore adding the J1833 data item would amend the CP1395 solution. The use of the J1833 data would improve, rather than undermine, CP1395.

When to revert to legacy CoS arrangements

The Workgroup considered at what point in the process the smart CoS process should stop and the existing CoS processes start in the event of a failure to communicate with the Meter (whether or not this is a communications equipment failure or other factor that prevents the communication). The Workgroup agreed that the Supplier would know on SSD when it tries to communicate with the Meter if there is a communications failure (though not necessarily why it failed).

A Workgroup member noted that the communications failure may be temporary, so it would not be desirable to go to the existing CoS process straightaway. The Workgroup noted that Issue 53 recommended SSD+4 Working Days as the duration for retrieving a read before the need to revert to the legacy arrangements, which it also agreed with.

The Workgroup agreed that the old Supplier should send its read to the new Supplier. In a situation where the old Supplier was unable to get a reading via the DCC, the Workgroup agreed that the old Supplier should provide the latest EAC, which the new Supplier could forward on to its NHHDC if it also could not get a reading via the DCC.

A Workgroup member noted that on the Unified Network Code (UNC) / Supply Point Administration Agreement (SPAA) related change, [the Smart Change of Supplier meter read working group](#) has recommended the use of the 'Notification of Old Supplier Information (NOSI)' data flow to communicate whether the Supplier has obtained the Daily Read information from the Meter. Another Workgroup member noted that the electricity Settlement equivalent NOSI flow, the D0311 data flow, is limited to domestic customers.

The Workgroup thought that the D0311 data flow would be a good mechanism for the old Supplier to communicate to the new Supplier whether it was able to retrieve the Daily Read information from the Meter, and where it could, to provide the registers and cumulative read. The Workgroup agreed that this would act as a check to ensure that the customer was billed on the same opening and closing read and that there was no under or overbilling. This would also ensure the accuracy of Settlement. It was noted that without this or something similar, under or over billing could occur under two circumstances. Firstly, where either Supplier in interrogating different internal registers makes an error or the data is corrupted during upload. Alternatively, where the new Supplier is unable to access the Meter read and bills on an estimate but the old Supplier has been able to access the Meter read and bills on the SSD midnight read.

The Workgroup therefore agreed that the scope of the data flow should be extended to non-domestic customers with relevant Meters. It also agreed that the data flow should be amended to allow Suppliers to include all of the register reads as well as the cumulative reads and include a flag to notify that the read included on the NOSI flow is the SSD midnight read or CoS read.

It also agreed that the use of the D0311 should be made mandatory for this solution so that the old Supplier sends this to the new Supplier along with the SSD midnight read SSD+4 where the Meter under the old Supplier's registration is serviced by the DCC. A Workgroup member noted that the rules for when sending the D0311 data flow under the smart CoS process would be different to the legacy arrangements. The Workgroup agreed to therefore include this in the solution and ask a question in the Assessment Consultation.

Assessment Consultation Question

Do you agree that the scope of the D0311 data flow should be extended and made mandatory for this solution?

Please provide your rationale.

The Workgroup invites you to give your views using the response form in Attachment B.

Where the new Supplier is unable to get the read and also unable to configure the Meter, then it would need to use the old Supplier's configuration details until such time that it was able to load its SSC. The Workgroup noted that there might be issues for the Supplier with respect to billing, if the old Supplier's SSC does not reflect the billing agreed with the customer. However, the Workgroup could not see how else this could be resolved.

It also noted that the DCC Service Levels associated with the communications with smart Meters require 99.0% (minimum) to 99.9% (target) availability. Therefore, it concluded, these should be rare exceptions.

Communicating to agents when to use legacy and reverting back to smart CoS process

The Workgroup discussed how the new Supplier would inform its agents to use the legacy CoS process in the event of a communications failure. The Workgroup agreed that a second D0155 data flow would be sent to communicate that the Metering System could not be serviced by the DCC. The Workgroup considered whether Suppliers should send a D0151 'Termination of Appointment or Contract by Supplier' data flow to back out the original D0155 so that the second D0155 data flow could be used. It agreed that most likely Suppliers would send a second D0155 as an update to the original (similar to a change of reading cycle) rather than backing out the original D0155 and replacing it with a 'legacy' one. It also concluded that backing out should only be necessary if the Supplier uses different agents for smart and legacy metering processes.

Members also considered that the new NHHDC should send the D0170 data flow to the old NHHDC to request read history to enable it to validate the data as per the current legacy processes.

The Workgroup considered whether the smart CoS process could be used after the legacy arrangements had been initiated, if either Supplier was subsequently able to communicate with the Meter via the DCC. It also considered whether a third D0155 data flow would then be sent to agents to inform them to use the smart CoS process and whether each D0155 needs a D0151. The Workgroup concluded that once the legacy process has been initiated, this would need to be completed. Thereafter, the NHHDC will start to receive routine readings for validation once communications with the Meter via the DCC has been established. Therefore, the third D0155 isn't that useful.

Members noted that there are currently different ways of doing things. It recognised that a Supplier might use the D0151 data flow if it wanted to use different agents for DCC serviced and non-DCC serviced Meters. The Workgroup thought that the method of communicating with agents should be included in the Assessment Consultation.

Assessment Consultation Question

What are your views on the use of the D0155 and D0151 data flows?

Please provide your rationale.

The Workgroup invites you to give your views using the response form in Attachment B.

How would the disputed CoS read processes work?

A Workgroup member queried what would happen if the Suppliers reverted to the legacy arrangements and one of the Suppliers got a different read to the other Supplier, which had obtained a midnight SSD read through the DCC. The Workgroup believed that the read received from the Meter was probably accurate and more reliable, so thought that the MRA disputed read process should be updated to include this. The Workgroup agreed to recommend that as P302 would impact MRA Agreed Procedure (MAP) 08 'The Procedure for Agreement of Change of Supplier Readings and Resolution of Disputed Change of Supplier Readings' that this is considered under the MRA change processes.

What considerations are needed over potential issues with universal time?

A Workgroup member asked whether there would be issues with UTC. ELEXON noted that the Meters use UTC but display local time. Another Workgroup member considered whether there would be issues where the Meter records a reading at midnight UTC but the CoS takes place at midnight local time. This means that, during British Summer Time (BST), the reading that both Suppliers would be obliged to use would be taken one hour before the CoS actually takes place on the Meter, which may also be when the new Supplier reconfigures the Meter. This then creates an issue for the old Supplier who would be accessing a reading taken an hour before the CoS event, and the new Supplier who would want to open its billing from the point at which it has reconfigured the Meter, which will be 01:00 BST. The Workgroup noted that unless the CoS actually takes place at midnight UTC on a smart Meter then this misalignment may create a barrier to using the Daily Read Log on the Meter as the CoS reading.

The Workgroup also noted that if the customer reads at the local time when this is BST, the customer might record the Meter reading at midnight BST, but the Suppliers would retrieve the Meter readings at 01:00 BST, which is midnight UTC. The Workshop agreed that this might be an issue and would require clear communications with the customer in such situations. However, the Workgroup did not propose a way forward to addressing this potential issue but agreed to consider this further after the Assessment Consultation.

What consequential changes are required to the legacy CoS processes?

The Workgroup believed that there might be a need to make changes to the legacy CoS processes should the Authority approve P302. The Workgroup agreed that this was outside the scope of P302 but that these consequential changes could be progressed through further CPs.

What would the impact be of future changes currently being considered?

The Workgroup noted that Ofgem is looking at next day switching. It agreed that P302 would be a stepping-stone towards this, but P302 could not consider other future changes that may or may not be raised or implemented.

What are the likely impacts and lead times for implementing P302?

ELEXON asked the Workgroup what the likely impacts and lead times would be for implementing P302. Workgroup members agreed that as the format and use of data flows will change, Suppliers and NHHDCs would need to make changes to their systems. This is likely to require 12 months lead time to develop, test and implement the changes. The Workgroup also agreed that participants' would need to update their processes.

Considerations on Implementation Date

The Workgroup considered whether to align the Implementation Date with the DCC go-live or to align with an appropriate BSC Release that allows for a 12 months lead time. Members agreed that the DCC go live date in December 2015 may change and that its preference was not to have P302 implementation contingent on this. It therefore agreed that P302 should be implemented as part of a BSC Release on efficiency and economical grounds. Therefore, the Workgroup's initial recommendation is that P302 should be approved with an Implementation Date of 25 February 2016 as part of the February 2016 BSC Release subject to the Authority decision being received by 24 February 2015.

7 Workgroup's Initial Conclusions

The Workgroup unanimously agreed that the P302 proposed solution would overall better facilitate the Applicable BSC Objectives compared with the existing baseline and should be approved.

The following table contains the Workgroup's initial views against each of the Applicable BSC Objectives for the proposed solution:

| Does P302 better facilitate the Applicable BSC Objectives? | | |
|--|--|---|
| Obj | Proposer's Views | Other Workgroup Members' Views ⁴ |
| (a) | <ul style="list-style-type: none"> Neutral – No impact | <ul style="list-style-type: none"> Neutral (unanimous) – as Proposer. |
| (b) | <ul style="list-style-type: none"> Neutral – No impact | <ul style="list-style-type: none"> Neutral (unanimous) – as Proposer. |
| (c) | <ul style="list-style-type: none"> Yes – as the changes would help reduce the complexity and associated cost of the CoS process for smart Meters, making customer switching a simpler, less onerous and more timely process. | <ul style="list-style-type: none"> Yes (unanimous) – as the Proposer. |
| (d) | <ul style="list-style-type: none"> Yes – by ensuring the CoS Meter read process for smart Meters reflects the enhanced functionality that smart Meters will provide. The proposed changes will reduce the amount of data transfers required between NHHDCs, which will improve the efficiency of the process as well as the timeliness and accuracy of the data being used in Settlement for smart Meters service by the DCC. | <ul style="list-style-type: none"> Yes (majority) – as Proposer. Neutral (minority of one) – the Workgroup member did not believe that this was necessarily the case. |
| (e) | <ul style="list-style-type: none"> Neutral – No impact | <ul style="list-style-type: none"> Neutral (unanimous) – as Proposer. |

Assessment Consultation Question

Do you agree with the Workgroup's initial unanimous view that P302 does better facilitate the Applicable BSC Objectives than the current baseline?

Please provide your rationale with reference to the Applicable BSC Objectives.

The Workgroup invites you to give your views using the response form in Attachment B.



Recommendation

The P302 Workgroup initially recommends that P302 is approved.



What are the Applicable BSC Objectives?

(a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System

(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 of electricity

(d) Promoting efficiency in the implementation of the balancing and settlement arrangements

(e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]

⁴ Shows the different views expressed by the other Workgroup members – not all members necessarily agree with all of these views.

Appendix 1: Glossary & References

Glossary of defined terms

Acronyms and other defined terms used in this document are listed in the table below.

| Glossary of Defined Terms | |
|---------------------------|---|
| Acronym | Definition |
| AA | Annualised Advance |
| BSC | Balancing and Settlement Code |
| BSCP | Balancing and Settlement Code Procedure |
| CoS | Change of Supplier |
| COSEG | Change of Supplier Expert Group |
| CP | Change Proposal |
| DCC | Data Communications Company |
| DTC | Data Transfer Catalogue |
| EAC | Estimated Annual Consumption |
| MRA | Master Registration Agreement |
| MTD | Meter Technical Details |
| NHH | Non Half Hourly |
| NHHDA | Non Half Hourly Data Aggregator |
| NHHDC | Non Half Hourly Data Collector |
| NHHMOA | Non Half Hourly Meter Operator Agent |
| PAB | Performance Assurance Board |
| PAF | Performance Assurance Framework |
| PAT | Performance Assurance Technique |
| SMETS | Smart Metering Equipment Technical Specifications |
| SMRS | Supplier Meter Registration Service |
| SPAA | Supply Point Administration Agreement |
| SSC | Standard Settlement Configuration |
| SSD | Supply Start Date |
| TA | Technical Assurance |
| UNC | Unified Network Code |
| UTC | Coordinated Universal Time |

DTC data flows and data items

DTC data flows and data items referenced in this document are listed in the table below.

| DTC Data Flows and Data Items | |
|-------------------------------|--|
| Number | Name |
| D0010 | Meter Reading |
| D0011 | Agreement of Contractual Terms |
| D0052 | Affirmation of Metering System Settlement Details |
| D0055 | Registration of Supplier to Specified Metering Point |
| D0058 | Notification of Termination of Supply Registration |
| D0086 | Notification of Change of Supplier Readings |
| D0148 | Notification of Change to Other Parties |
| D0149 | Notification of Mapping Details |
| D0150 | Non Half Hourly Meter Technical Details |
| D0151 | Termination of Appointment or Contract by Supplier |
| D0152 | Metering System EAC/AA History |
| D0153 | Notification of Data Aggregator Appointment and Terms |
| D0155 | Notification of Meter Operator or Data Collector Appointment and Terms |
| D0170 | Request for Metering System Related Details |
| D0209 | Instruction(s) to Non Half Hourly or Half Hourly Data Aggregator |
| D0217 | Confirmation of the Registration of a Metering Point |
| D0311 | Notification of Old Supplier Information |
| J1833 | DCC Service Flag |
| J1839 | SMETS Version |

External links

A summary of all hyperlinks used in this document are listed in the table below.

All external documents and URL links listed are correct as of the date of this document.

| External Links | | |
|----------------|---|---|
| Page(s) | Description | URL |
| 5, 15 | Link to CP1395 webpage | http://www.elexon.co.uk/change-proposal/cp1395/ |
| 6 | Ofgem open letter on reforming the CoS read process to make use of the benefits of smart Meters | https://www.ofgem.gov.uk/publications-and-updates/open-letter-reforming-change-supplier-cos-meter-read-process-smart-electricity-meters |
| 6 | Link to Issue 53 webpage | http://www.elexon.co.uk/smg-issue/issue-53/ |
| 16 | Link to the Smart Change of Supplier meter read working group | http://www.spaa.co.uk/committees-groups/detail?committeeid=206303 |

Appendix 2: Workgroup Details

Workgroup's Terms of Reference

Specific areas set by the BSC Panel in the P302 Terms of Reference

Should the new process apply to all DCC serviced smart Meters (SMETS1 and SMETS2) or just SMETS2 Meters?

What are the appropriate changes to the D0155 data flow to provide the mechanism to indicate whether:

- a site has a smart Meter; and
- the smart or non-smart CoS process should be followed?

What is the means by which the Supplier verifies the configuration of the smart Meter and notifies the NHHDC and NHHMOA what the SSC and Meter register configuration is?

What is the appropriate process assurance for the proposed CoS process changes?

In the event of a CoS event and a concurrent communications failure (or DCC opt-out) how quickly should the non-smart process be initiated?

Are there any necessary improvements to the Disputed Read Process?

What is the appropriate implementation approach for the process changes?

What changes are needed to BSC documents, systems and processes to support P302 and what are the related costs and lead times?

Are there any Alternative Modifications?

Does P302 better facilitate the Applicable BSC Objectives than the current baseline?

Assessment Procedure timetable

P302 Assessment Timetable

| Event | Date |
|---|-----------------------|
| Panel submits P302 to Assessment Procedure | 12 Jun 14 |
| Workgroup Meeting 1 | 24 Jun 14 |
| Assessment Procedure Consultation | 18 Jul 14 – 08 Aug 14 |
| Workgroup Meeting 2 | W/B 11 Aug 14 |
| Panel considers Workgroup's Assessment Report | 11 Sep 14 |

Workgroup membership and attendance

| P302 Workgroup Attendance | | |
|---------------------------|------------------------------------|-----------|
| Name | Organisation | 24 Jun 14 |
| Members | | |
| David Kemp | ELEXON (<i>Chair</i>) | ✓ |
| Simon Fox | ELEXON (<i>Lead Analyst</i>) | ✓ |
| Paul Saker | EDF Energy (<i>Proposer</i>) | ✓ |
| Adam Iles | British Gas | ✓ |
| Stephen Johnson | IMServ | ✓ |
| Eric Graham | TMA | ✓ |
| Seth Chapman | G4S | ✓ |
| Gary Burrows | Opus Energy | ✓ |
| Rachael Burn | E.ON Energy | ✓ |
| Dave Smith | npower | ✓ |
| Mark Young | First Utility | ✗ |
| Claire Hemmens | SSE | ✓ |
| Colin Frier | Siemens | ✓ |
| Attendees | | |
| Jon Spence | ELEXON (<i>Design Authority</i>) | ✓ |
| Tim Kerr | ELEXON (<i>Lead Lawyer</i>) | ✓ |
| Rachel Hay | Ofgem | ✓ |