

Phase

Initial Written Assessment

Definition Procedure

Assessment Procedure

Report Phase

Implementation

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.



The BSC Panel recommends **approval** of P302

This Modification is expected to impact:

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

Consequential changes will be required to:

- The Data Transfer Catalogue (DTC)



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About This Document

This is the P302 Final Modification Report, which ELEXON has submitted to the Authority on behalf of the BSC Panel. It includes a summary of the Workgroup's assessment, the Panel's full views and the responses to both the Workgroup's Assessment Consultation and the Panel's Report Phase Consultation. The Authority will consider this report and will decide whether to approve or reject P302.

There are four 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 and Code Subsidiary Documents for P302.
- Attachment B contains the full responses to the Workgroup's two Assessment Procedure Consultations.
- Attachment C contains the full responses to the Panel's Report Phase Consultation.

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Why Change?

A Modification is required to put in place the necessary Balancing and Settlement Code (BSC) and BSC Procedure (BSCP) changes to support the change of Supplier (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 the new Supplier to collect the total cumulative and time of use Meter register readings via the DCC and pass these to the old Supplier, and where this is not possible it sets out the timescales and processes for initiating the legacy (i.e. non-smart) CoS process.

Impacts & Costs

P302 will impact **all Suppliers, Non Half Hourly (NHH) Data Collectors (NHHDCs)** and **NHH Meter Operator Agents (NHHMOAs)**, who will need to amend systems and processes associated with the CoS process. It will also impact **Distribution System Operators (DSOs)**, who will receive an additional D0086 'Notification of Change of Supplier Readings' data flow.

Implementation

The Panel recommends an Implementation Date for P302 of **30 June 2016** as part of the June 2016 Release, if an Authority decision is received on or before 29 June 2015.

This is to allow participants at least 12 months lead time to implement the changes to their systems and processes.

Recommendation

The Panel unanimously agrees that P302 **would better facilitate Applicable BSC Objective (d)** and therefore unanimously recommends that P302 should be **approved**.

What is the change of Supplier process?

In order to establish the respective Settlement and customer billing liabilities on a CoS, the new Supplier (or new NHHDC) must obtain Meter readings 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. The customer's chosen new Supplier uses an opening read(s) as a starting point for electricity consumption going forward. Unless there is a change of Meter concurrent with the CoS, the opening and closing reads should be the same.

From a BSC perspective, Settlement processes use these CoS Meter reads to allocate metered import or export for NHH Metering Systems 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 (MTD) to the new NHHDC via the new NHHMOA. This transfer of MTDs allows the new NHHDC to correctly interpret the Meter readings from a customer's Meter.

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 old NHHDC provides this information to enable 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 NHHDC provides the first Annualised Advance (AA).

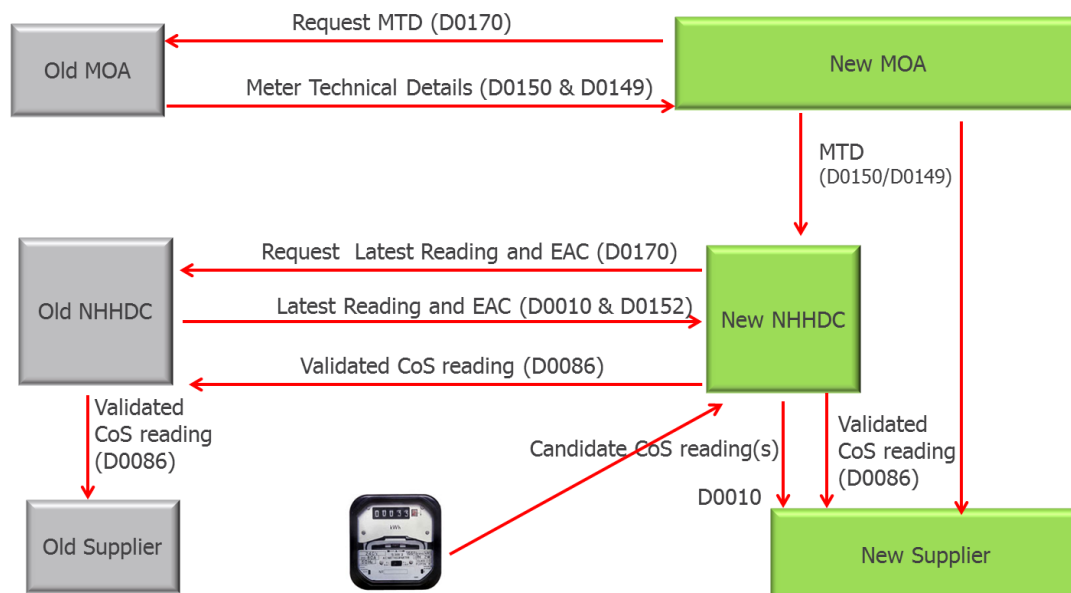
The transfer of MTDs, EACs and Meter readings between the old and new Supplier Agents depends on:

- the new Supplier appointing new Supplier Agents;
- the new Supplier notifying the new agents of each other's identities and of the relevant old agents' identities; and
- the new agents to request the relevant data flows from the old agents.

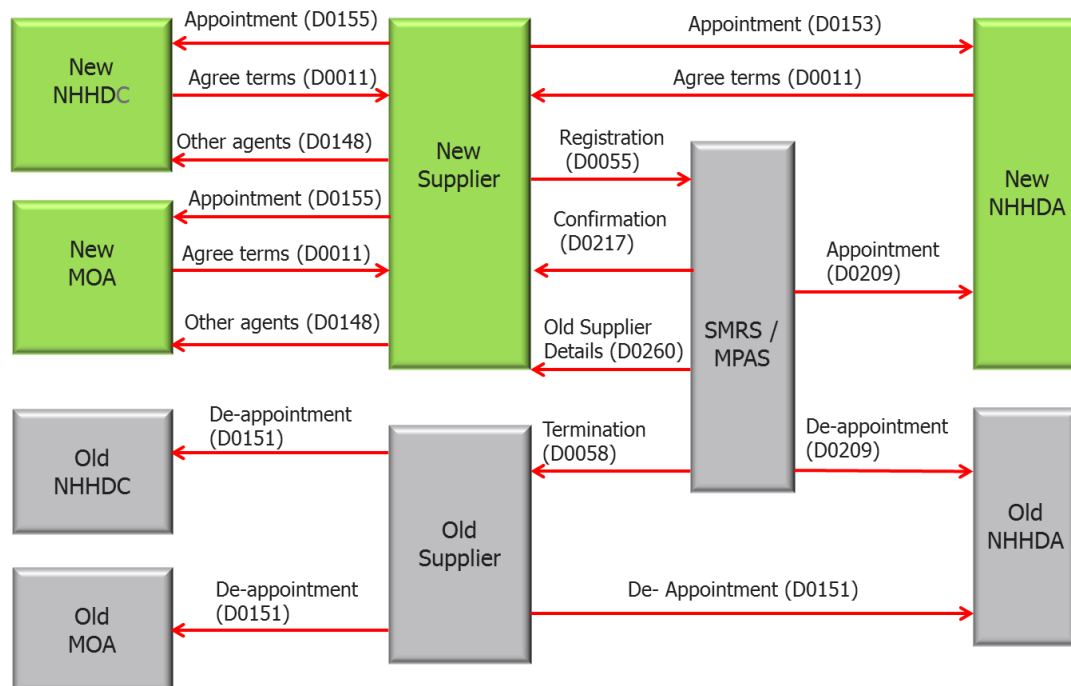
The following two diagrams summarise the current CoS process and the agent appointment and de-appointment processes. The current CoS read process has direct links and dependencies on the agent appointment process.

¹ A new SSD is the point at which a new Supplier starts providing electricity to a customer. This begins 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



Appendix 2 details the data flows referenced in these diagrams.

The current CoS reading process is complicated and depends on multiple data flows. As a result, the current process is lengthy and prone to error in the instances when a participant does not send these data flows or the recipient cannot process them. Delays and failures in the process can result in inaccurate data, impacting both Settlement and customer billing. Suppliers, agents and ultimately customers bear the costs of resolving these delays and failures.

² Please note that the CoS process diagram shows a simplified version of the process before the implementation of CP1395 'Distribution of Configuration Details for Smart Meters'. CP1395 modified this process when it took effect on 26 February 2015 as part of the February 2015 Release. The changes took into account the presence of the DCC. If a customer has a smart DCC serviced smart Meter, the Supplier will obtain a CoS read rather than the new NHHDC. Once the DCC goes live, the Supplier will achieve this by sending a request to the smart Meter via the DCC. The CoS process diagram does not illustrate this revised functionality which will only take effect once the DCC goes live.

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 customer confidence. Simultaneously, it is important that any reforms maintain or improve the accuracy of Settlement.

Suppliers are already rolling out Smart Meters to homes and small businesses, and plan to begin the large scale roll-out from April 2016. The current expectation is that Suppliers will complete the smart Meter roll-out 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 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.

With the advent of the DCC, the new Supplier will retrieve the CoS reading from the smart Meter via the DCC and pass it to the new NHHDC for validation. In order to process the closing reading on behalf of the old Supplier (i.e. under the current CoS process), the new Supplier will need to request the old Supplier's configuration from the Meter via the DCC or via the old Supplier's MOA, in addition to (optionally) downloading its own configuration to the Meter. The new Supplier may need final reading(s) for the old configuration and initial reading(s) for the new configuration. In order to validate the final and initial readings, the new NHHDC will need both the old and new configurations. The CoS process for smart Meters could therefore be more complicated than for traditional Meters, given the ease with which the new Supplier will be able to reconfigure the smart Meter on the CoS date (e.g. to support a new tariff). This complexity will not be limited to changes of Standard Settlement Configuration (SSC). The new Supplier will reconfigure the smart Meter on CoS (including the tariff rates associated with each of the time of use registers). Even if the new Supplier adopts the same SSC as the old Supplier, the new Supplier may not map the physical registers on the Meter to the same Settlement Registers as the old Supplier.

Ofgem and the CoS Expert Group

Ofgem has engaged 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.

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

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 and is published on the [Issue 53 webpage](#).

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

P302 seeks to take forward the DCC serviced smart Meter CoS process discussed under Issue 53. The solution will apply to smart Meters that are serviced by the DCC, but may also, by agreement of the two Suppliers, be used for Smart Metering Equipment Technical Specifications (SMETSs) compliant Meters that are not serviced by the DCC.

The proposed solution is a variant of an alternative solution that the P302 Workgroup consulted on under its second Assessment Procedure Consultation.

What is the process?

New Supplier-led readings

P302 proposes that the new Supplier will be responsible for retrieving the readings and passing these to the old Supplier.

On a CoS event the new Supplier will take readings from the smart Meter's 'Daily Read Log' at the time of reconfiguring the smart Meter. These readings will consist of a total cumulative reading and readings from each time of use registers. It is assumed that this will be close to midnight (Coordinated Universal Time (UTC)) on SSD, though this may not always be possible. However, the daily read log holds a snapshot of the register readings at midnight UTC.

The new Supplier will send all readings to the old Supplier using the D0010 'Meter Readings'. Where the old Supplier has not received the D0010 data flow with reads, the old Supplier will contact the new Supplier.

The old Supplier will also take midnight UTC readings from the smart Meter's 'Daily Read Log' and pass these to the new Supplier, which may optionally use the readings to validate its own readings. The new Supplier will also take midnight UTC readings from the smart Meter's 'Daily Read Log'. These will be used for comparison with the midnight UTC readings taken by the old Supplier.

The old Supplier should be able to obtain its reading on the SSD in all but rare circumstances (for example if a communications failure coincides with the CoS event). Otherwise, the old Supplier 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.

Both parties will use the same reading. If the new Supplier's reads cannot be used for billing or Settlement, the old Supplier will initiate the disputed reads process. This will be in accordance with the Master Registration Agreement (MRA) Agreed Procedure [\(MAP\) 08 'The Procedure for Agreement of Change of Supplier Readings and Resolution of Disputed Change of Supplier Readings'](#).

New Data Collector impacts

The new Supplier will send the new NHHDC the readings associated with the Metering System's SSC/Time Pattern Regimes (TPRs), which may be the same as or different from that of 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 UTC readings from various registers. These registers include the total cumulative register and each of the 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 traditional, non-smart 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.

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As opening readings from the smart Meter are likely to be accurate in all but exceptional circumstances (e.g. Meter malfunction), the new NHHDC will not need to validate them against the reading history and latest EAC from the old NHHDC. This will remove a dependency that can cause delays to the CoS process.

The new NHHDC will use a class average EAC from the new Supplier rather than the latest calculated EAC from the old NHHDC. However, any loss of accuracy will be short-lived, given the improved prospects of replacing the EAC with an AA in shorter timescales with smart metering.

Old Data Collector impacts

The old Supplier will only send the old NHHDC the readings associated with the Metering System's SSC/TPRs.

Legal text

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

Amendment to the BSC:

- requirements in [Section S Annex S-2 'Supplier Volume Allocation Rules'](#), section 4.3.13 relating to the calculation of AA and EAC values, such that:
 - The old Supplier's NHHDC will only be required to send the previous EAC where requested to do so by the new Supplier's NHHDC;
 - The new Supplier will provide an initial EAC to its NHHDC, in the circumstances set out in [BSCP504 'Non-Half Hourly Data Collection for SVA Metering Systems Registered in SMRS'](#); and
 - The new NHHDC will use the initial EAC provided by its Supplier in the event that the old NHHDC has not provided a previous EAC (typically for DCC serviced smart Meters without functioning communications).
- [Section X Annex X-1 'Glossary'](#) to introduce the definition of DCC.

It also requires amendments to BSCP504 and [BSCP514 'SVA Meter Operations for Metering Systems Registered in SMRS'](#) to capture the proposed CoS read process changes.

Attachment A includes the draft redlined changes to the BSC and Code Subsidiary Documents (CSDs).

Solution requirements

The key features of the proposed solution are:

- The new Supplier will obtain the SSD readings on configuration of the smart Meter and as soon after midnight UTC as possible. The new Supplier will pass the total cumulative reading and all time of use register readings to the old Supplier. The new Supplier will send the readings on a D0010 data flow. A change to the Data Transfer Catalogue (DTC) will be needed to allow a Supplier-to-Supplier instance of the D0010 data flow.

- The old Supplier will still take an actual midnight reading(s) and send its readings to the new Supplier to enable the new Supplier to check its reading(s). This will be sent on the D0010 data flow.
- The old and new Suppliers will pass the relevant time of use register readings to their respective NHHDCs. The relevant readings will be those associated with the SSC and TPRs used by the respective Suppliers.
- The NHHDCs will separately validate the readings and send D0086 data flows to their respective Suppliers by SSD+8 WD.
- If the new Supplier configures the smart Meter after midnight UTC on SSD, any units consumed between the midnight UTC reading(s) and the readings taken on reconfiguration will effectively be billed to the old Supplier. These are expected to be minimal.
- For delays of up to SSD+5 WD, the new Supplier will re-date the SSC (and associated readings) to SSD. For delays of longer than SSD+5 WD, the new Supplier will adopt the old Supplier's SSC for the intervening period.
- If the new Supplier is unable to retrieve the Meter reading(s) from the smart Meter by SSD+5 WD (for example, because of a communications failure), it will initiate the legacy CoS processes.
- The new Supplier will confirm the configuration of a smart Meter on a CoS and pass the SSC and Meter register configuration to its NHHMOA. The new NHHMOA will wait for the MTD from the old NHHMOA, update these with the SSC and register mappings from the new Supplier and then send to the new NHHDC, Supplier and DSO.
- The new Supplier will provide the NHHDC with an Initial (class average) EAC for use until the NHHDC has taken a second reading and processed an AA. The new NHHDC will not be dependent on receiving the latest reading and EAC from the old NHHDC.
- The new Supplier will use the D0170 'Request for Metering System Related Details' data flow, which will include a new Requested Action Code value, to request that the NHHDC and NHHMOA follow the legacy CoS process.
- If the new Supplier invokes the legacy process due to a communications failure, the process will run to its conclusion, even if the Supplier or DCC is able to restore communications. Supplier will pass any subsequent readings from the smart Meter into the legacy process.

Assumptions

The Workgroup assumed that the DCC communication service levels would be met from the DCC go live allowing new configurations to be made in a timely manner. The proposed solution caters for the exceptions, but the Workgroup is concerned that any significant failures in the service levels could be detrimental to customers' experience.

Are there any alternative solutions?

The P302 Workgroup did not recommend an alternative solution. However, it did consider a number of solutions and consulted on two of these.

It also explored and modelled a further two solutions, which were proposed as part of the first Assessment Consultation; and an alternative solution, which was proposed as part of the second Assessment Consultation. The Workgroup rejected these.

Whilst the Workgroup supported the proposed and did not propose an alternative, it recognised that none of the options it could consider were optimal, but the proposed was the most favourable of those it considered.

Original Proposed – both Suppliers take reads

The original proposed solution, which the Proposer ultimately dropped and which did not have majority support from the Workgroup, would have required both the old and new Supplier to collect readings via the DCC. The old Supplier's readings, whether actual or estimate, would have been provided on the D0311 'Notification of Old Supplier Information' data flow. This was to allow the new Supplier to perform a consistency check with its own readings (if actual readings were obtained from the smart Meter) or to pass to the new NHHDC in the event that the non-smart process is invoked because of a communications failure. If the old Supplier was unable to obtain readings from the smart Meter, the D0311 data flow to the new Supplier would have included an estimated CoS reading. Otherwise, this solution was generally the same as P302 proposed.

Original Alternative – new Supplier led with old Supplier sending D0311 data flow

Under the second Assessment Procedure Consultation, the Workgroup set out an alternative solution that, as with the P302 Proposed, would also have required the new Supplier to collect the Meter register readings via the DCC and pass these to the Old Supplier. However, instead of using the D0010 data flow, as in the P302 proposed, the new Supplier would have used the D0311 data flow to pass these on to the old Supplier. The use of the D0311 data flow was ultimately dropped in favour of the D0010. This was because the Workgroup agreed with the Proposer that mandating the D0311 data flow for non-domestic Metering Systems would have meant a significant system change for Suppliers (and therefore more expensive).

Alternatives from first Assessment Consultation

As part of the first Assessment Consultation, two other alternative solutions were proposed.

In one alternative option, the old Supplier hub would deem a CoS reading in the event of a communications failure based on its reading history. The Workgroup explored and modelled this option, but concluded that it would either require changes to the legacy process or create three processes: for smart Meters with operational communications, smart Meters without operational communications; and non-smart Metering Systems. As the scope of P302 is limited to CoS for smart Meters, the Workgroup agreed not to develop the solution further. The Workgroup noted that this alternative option could be explored further to improve the CoS process for all types of Meters.

In the other alternative option, the NHHDC would revert to the non-smart CoS process in the absence of a CoS reading from the new Supplier (and using the D0311 data flow), rather than on an explicit notification from the Supplier.

Again the Workgroup explored and modelled this option, but noted that the NHHMOA would be unaware that the NHHDC had reverted to the legacy process, so the solution was incomplete.

In addition to this, a number of other considerations were discussed that may benefit the CoS process but that would have wider impacts than the BSC and which the Workgroup recommend exploring further. The Workgroup thought that these would potentially deliver better solutions. However, it could not consider these due to the scope of the Modification. These included:

- centralised registration, which Ofgem is already considering as part of Ofgem's smarter markets work;
- the potential for the DCC to actively send the CoS read to both Suppliers, which could not be considered without a significant change to the remit of the DCC;
- amending the DCC system and smart Meters to operate in clock time (or amending Settlement to work in UTC);
- amending the DCC system and SMETS to allow the new Supplier to reset time of use registers to zero on CoS; and
- revisiting some aspects of rejected [Change Proposal \(CP\) 1388 'Meter Technical Details for Smart Meters'](#) to reduce the dependency of the CoS process on the transfer of MTD.

Alternate from second Assessment Consultation

A respondent suggested that as an alternative, the old Supplier should be obligated on receipt of the D0058 'Notification of Termination of Supply Registration' to send a request to the DCC to schedule a Billing Calendar Event (Billing Data Log Snapshot) to be activated for 00.00 UTC on SSD, on the Meter.

The respondent noted that the Billing Data Log Snapshot contains both the Total Cumulative and 48 Register Reads from the smart Meter and can be accessed by both the old and new Supplier. It believes that this negates any reliance on either the old or new Supplier to validate the Meter readings taken at different times by both Suppliers, as they are both referencing the same data point held in the Meter.

It also proposed that the new NHHDC provides a copy of the opening read to the old NHHDC to enable the old NHHDC to check the reading and snapshot.

The respondent recognised that there could be instances where there is a delay in exchanging the security keys in the Meter and reconfiguration by the new Supplier, which may result in some energy to not be accounted for in Settlement. Recognising that there would be a need to account for the energy, it proposed that the HH data log in the Meter could be used to determine when the energy was consumed to enter into Settlement.

The Workgroup noted the merit of the solution for where all the Metering Systems were smart and there was no need for legacy arrangements. It also noted the similarities with the original proposed. However, the Workgroup ruled this solution out on the grounds that

it would still need processes for entering missing units in to Settlement and for reverting to legacy.

Conclusions on alternative solutions

Overall, the Workgroup by majority does not believe there are any further potential alternative solutions that would better facilitate the Applicable BSC Objectives than the proposed solution.

Risks to Settlement

P302 seeks to reduce the dependences between the old and new Supplier hubs. However, the Workgroup was mindful not to do this at the expense of an unacceptable risk to Settlement (or to the detriment of the customer). The P302 Workgroup therefore considered whether there would be an increase in 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.

The P302 Workgroup noted that under the original proposed solution, the old Supplier is reliant on the new Supplier to identify differences between the closing readings (notified by the old Supplier on the D0311 data flow) and the opening readings taken from the smart Meter. The old Supplier is then reliant on the new Supplier to raise a dispute under MAP08 'The Procedure for Agreement of Change of Supplier Readings and Resolution of Disputed Change of Supplier Readings' where there is a mismatch. It concluded that the risk of overbilling (both in Settlement and customer billing) is arguably higher than under the (proposed and original alternative) solutions where both Suppliers are using the same reading to open and close customer bills and Settlement liabilities.

However, it also noted that the old Supplier is less dependent on the new Supplier under the original proposed solution than under the P302 proposed and original alternative solutions. So from this perspective, it concluded that these may carry more Settlement (and customer billing) risk. Whilst the Workgroup recognises that there is a risk, it believes that the probability will be minimal given the expected availability of the Meter readings. Nonetheless, it is recommending engagement with the Performance Assurance Board (PAB) during the Report Phase of P302 to ensure that the PAB has sufficient time to consider any changes to the Risk Evaluation Register (RER) and Risk Operating Plan (ROP) to capture any risk and mitigate it.

The view of the Workgroup is also that it is not an option to do nothing. It believes that with no clear processes to manage the changes in operation introduced by the DCC-serviced Meters, the benefits to customers and Settlement will not be realised and will introduce a risk of Settlement Error due to unaccounted units.

Consequential changes

Changes to the DTC will be required to introduce a Supplier-Supplier instance of the D0010 data flow to enable the P302 proposed solution.

Changes to the DTC will also be required to introduce a new Requested Action Code value for use in the D0170 data flow to enable Suppliers to inform the NHHDC and NHHMOA that the legacy CoS process is to be followed.

The Workgroup also recommended that consideration be given under the MRA change process to adding a new data item to the 'Notification of Meter Operator or Data Collector Appointment and Terms' (D0155) flow to indicate that the smart CoS process should be used.

The Workgroup has identified a need to review MAP08 in light of P302, which may result in changes to this and further changes to BSCP504 and BSCP514.

There was general agreement by the Workgroup that further changes may be required once more is known about the DCC solution, its ability to perform and with the potential move to HH Settlement for these customers at some point in the future.

Considerations on Implementation Date

The Workgroup originally 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 were aware that the DCC go live date in December 2015 may change (this was recently consulted on⁴), and so its preference was not to have P302 implementation contingent on this. It agreed that P302 should be implemented as part of a BSC Release on efficiency and economical grounds, noting also that a BSC Modification's Implementation Date could not be contingent on another event.

The Workgroup's original initial recommendation was 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. It was noted that this may have required complex interim solutions between the DCC go live date and the P302 Implementation Date.

However, due to other alternative solutions being explored and more time therefore needed to develop explore and model these, the original proposed Implementation Date was not achievable and therefore the P302 Workgroup made a revised recommendation of 30 June 2016 as part of the June 2016 BSC Release.

As the DCC go live is now April 2016 there will likely be a need for interim solutions. ELEXON will investigate and raise any necessary CPs.

⁴ http://www.smartdcc.co.uk/media/14108/141117_dcc_plan_and_im_consultation.pdf

Estimated central implementation costs of P302

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

Indicative industry costs of P302

Participants have indicated that they will need to make significant changes to processes and systems, and consequently, to associated documentation and training of staff. It was noted that parallel processes for smart and non-smart would be required.

Suppliers are likely to require changes to billing and customer information systems as well as to update systems to send and receive the D0010 data flow.

NHHDCs will need to update systems, processes and documentation to remove the need for validation against the reading history and latest EAC when acting as the new NHHDC. NHHDCs will also need to introduce validation and D0086 processes as the old NHHDC for closing readings.

Suppliers and agents will need to be able to record and process all 48 time of use register readings as well as the cumulative register reading.

DSOs may need to process two D0086 data flows, which would add complexity to the process and result in system changes.

P302 impacts

| 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 | |
| DSOs | DSO may need to amend systems and processes to allow for the receipt of two D0086 data flows, one from each Supplier. |

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

| Impact on BSCCo |
|-----------------|
| 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 – see Attachment A. |
| Section X Annex X-1 | Addition of new defined term – see Attachment A. |

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 – see Attachment A, respectively. |
| BSCP514 | |

Impact on Core Industry Documents and other documents

| Document | Impact |
|-------------------------------------|---|
| Master Registration Agreement (MRA) | <p>Changes will be needed to the DTC to allow:</p> <ul style="list-style-type: none">• the D0010 data flow to be sent between new and old Suppliers;• introduce a new Requested Action Code value for use in the D0170 data flow; and• subject to further review under the MRA change process, to introduce a new data item to the D0155 flow to indicate that the smart CoS process should be used. <p>It is anticipated that changes will be needed to MAP08.</p> |

Recommended Implementation Date

The Workgroup recommends an Implementation Date for P302 of **30 June 2016** as part of the June 2016 release, if an Authority decision is received on or before 29 June 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.

When will the final and opening reads be retrieved?

A Workgroup member asked whether the old and new Suppliers would obtain the Meter readings on or after midnight. The Proposer clarified that the Meter will record the reading at midnight UTC in the Daily Read Log, which both Suppliers could retrieve on SSD. The Workgroup understood 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 access to readings is not achieved through a 'critical command' and as such doesn't require security credentials. Instead, access is permitted by the DCC according to records of registered Suppliers taken from the DCC's copy of Meter Point Administration Service (MPAS) data. 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 SMETS 2 Meter will retain the data in the Daily Read Log for 31 days, when the rolling log is then overwritten. The availability of readings from the Daily Read Log is less critical under the proposed (where such readings are only used as a control), than under the original proposed (where midnight readings were more critical to the solution).

How should re-configuration and Meter readings after midnight be treated?

As part of the original proposed solution, the old Supplier would retrieve the closing readings from the Daily Read Log. The new Supplier would retrieve the opening readings at the time of re-configuring the Meter. The original proposed solution includes a process for accounting for any units imported (or exported) between midnight UTC and the time of reconfiguration (where later). Under the proposed and original alternative solution, both Suppliers will use readings retrieved on re-configuration by the new Supplier, so this additional process will not be needed.

In all solutions considered, the Workgroup agreed that the effective date of the new Supplier's SSC (where different to that of the old Supplier's SSC) should be re-dated to the SSD in the event that the Supplier is able to reconfigure the smart Meter between SSD+1 WD and SSD+5 WD. This is in line with the current CoS process. Where the new Supplier is unable to reconfigure the smart Meter by SSD+5 WD, the old Supplier's SSC should be adopted and the change of SSC process followed. The Workgroup recognised that this approach may have impacts in terms of retaining actual dates.

What implications will P302 have for customer billing?

The Workgroup noted that there might also be issues for Suppliers with respect to billing. For example, if the new Supplier has agreed a new time of use tariff with the customer, but has to continue using the old Supplier's SSC due to communication issues with the smart Meter. It was recognised that issues with the customer billing experience are outside the scope of the BSC solution to this issue and that the Supplier would need to manage its communications with the customer. The Ofgem representative queried whether the P302 original proposed or original alternative solution more successfully mitigates the risk of inaccurate customer billing and whether any further changes could be made to either option to further reduce discrepancies in billing. The Workgroup agreed that this question is unable to be answered under P302 as it is a Supplier-customer relationship issue, but noted Ofgem's concern to ensure accurate billing.

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.

The Workgroup discussed the relative double billing risks of the original proposed and original alternative solutions and P302 proposed. As these risks apply to Settlement accuracy as well as customer billing accuracy, the arguments are noted under 'Risks to Settlement' in Section 3.

In terms of the timeliness of billing, the Workgroup noted that the dependency on the new Supplier under the original alternative solution (and P302 proposed) could mean that closing bills would be issued later than under the original proposed solution. Under the original proposed solution, the old Supplier could theoretically issue the closing bill as early as SSD. Under the original alternative solution (and P302 proposed) SSD was also theoretically possible, although one or two days later was more likely. It was noted that, even under the original alternative solution (and P302 proposed), the old Supplier could bill early on the midnight reading and either write off the interim consumption up until the point of reconfiguration or send a small follow-up bill.

How should the new Supplier transfer readings to the old Supplier as part of the original alternative solution?

The Workgroup originally explored the use of the D0311 data flow as a means to transfer the readings between Suppliers. Under the P302 proposed, the D0010 data flow will be used to transfer the new Supplier's readings to the old Supplier.

It was noted that the benefit of the D0311 data flow is that it would include an EAC, which may be useful for the new Supplier. However, the concern was that this would need an MRA change to mandate D0311 data flow for non-domestic Metering Systems, which would be a significant change to systems and processes for some Suppliers that don't currently need to use the D0311 data flow.

The Workgroup noted concerns that the D0010 data flows used for the Change of Supplier process could get lost among the high numbers of D0010 data flows sent for routine readings. However, it also noted that as this D0010 data flow would be received from the new Supplier, this could be to differentiate. It recognised that this would still require a change to the DTC to allow a Supplier-to-Supplier instance of the D0010 data flow and a convention for transferring the total cumulative register reading, along with all 48 of the time of use register readings. However, it believed that this would be a less onerous change than the changes required to mandate the use of the D0311.

The Workgroup also considered whether a new data flow or the use of the DCC User Gateway Interface Specification (DUGIS) EXtensible Markup Language (XML) service format should be used. However, it concluded a new data flow would be a significant change, and that it wasn't certain how Suppliers would transfer and consistently process the XML in their systems.

What version of SMETS should the solution cover?

The Workgroup considered whether the solution should be limited to SMETS 2 (or higher versions should these become available) or also open to SMETS 1 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, which would be identified by the DCC service flag. A Workgroup member noted that a SMETS 1 Meter will have a Daily Read Log, albeit holding 14 rather than 31 calendar days' 'midnight reads'. The solution will not preclude the new process being used, by agreement of both Suppliers, where a smart Meter is not serviced by the DCC.

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

The Workgroup discussed a number of communication scenarios, which included how Suppliers would communicate with its agents:

- that a Metering System has a smart Meter (and which version of SMETS this is);
- whether the DCC services the Meter; and
- when to use the smart or legacy processes for CoS.

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 'DCC Service Flag' data item). Under both the original solutions, the new Supplier would then send the D0155 'Notification of Meter Operator or Data Collector Appointment and Terms' data flow, which could be amended to include a new 'Smart Process Indicator' 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 [CP1395 'Distribution of Configuration Details for Smart Meters'](#), which was implemented on 26 February 2015, the solution uses the contract reference to communicate whether the Metering System is smart. Therefore adding the new data item would amend the baseline solution introduced by CP1395. The use of the new data item would improve, rather than undermine, CP1395. P302 still seeks, subject to further review under the MRA change process, to introduce a new data item to the D0155 flow to indicate that the smart CoS process should be used.

Under P302, the Supplier will use the D0170 data flow with a new Requested Action Code value to request that the NHHDC and NHHMOA follow the legacy CoS process. The Workgroup recognised that this would reduce development costs compared with the original solutions of using multiple D0155s and the potential impact that would have had on Performance Assurance Reporting and Monitoring System (PARMS) reporting.

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 this is a communications equipment failure or another 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 WD as the duration for retrieving a read before the need to revert to the legacy arrangements, but agreed to extend this to SSD+5 WD to align with the CoS read window.

How would the disputed CoS read processes work?

Under the current disputed readings process, as defined in MAP08, either Supplier can dispute the CoS reading provided by the new Supplier's NHHDC. The process is designed to cater for the situation where a single reading (or set of register readings) has been determined as the CoS reading(s) by the new Supplier's NHHDC and the old Supplier has good reason to suspect that the reading is incorrect (or the new Supplier has new evidence to suspect that the reading is incorrect).

The Workgroup has recommended that the scope of the MAP08 processes should be widened, such that the new Supplier should raise a dispute if the old Supplier intends to use a closing reading, which is different to an actual reading obtained by the new Supplier from the smart Meter. The current MAP08 process is design to ensure an accurate CoS reading is used, whereas the revised MAP08 process will need to include steps to avoid double billing. Whilst it was less likely to happen under the P302 proposed solution, the Workgroup felt would likely require a new rule whereby readings taken from the smart Meter take precedence over other readings.

The Workgroup recommend that as P302 would impact MAP08, a review of MAP08 should be carried out under the MRA change processes. The Workgroup noted that it expected that this could result in a CP to further change the associated timescales in BSCP504.

What considerations are needed over potential issues with UTC?

The Workgroup considered issues arising from the use of UTC. ELEXON noted that SMETS2 Meters and the DCC use UTC, but Settlement, registration and In Home Displays use clock time. Changes in Settlement liabilities are deemed to occur at midnight clock time and consequently any changes to registration systems are deemed to occur at midnight clock time. In particular, the Workgroup considered whether there would be issues resulting from the Meter recording a reading at midnight UTC, but the CoS taking place at midnight clock time. This means that, during British Summer Time (BST), the reading would be taken at 01:00 BST. So during BST, the old Supplier would be liable (in Settlement) for an additional hour's consumption which was actually taken in the new Supplier's registration, and would presumably bill the customer for this additional hour. Given that the current rules allow readings taken up to SSD+5 WD on either side of the SSD to be treated as if they were taken at midnight on the SSD, this would not create any concerns in terms of Settlement accuracy. Moreover, an average domestic customer would probably consume less than 1kWh between midnight and 01:00 BST. However, this could cause customer confusion, which would need to be managed by Supplier communications.

What consequential changes are required to the legacy CoS processes?

The Workgroup identified some potential improvements 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. This is further covered in Section 3.

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

The Workgroup noted that Ofgem has a stated ambition for 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. Ofgem has indicated that this is likely to be a consideration in its decision, given the links it has highlighted between faster switching and a competitive market. The Workgroup, when considering the solutions, was mindful that it needed to facilitate faster switching but it could not develop a solution that facilitated the ambition of next day switching without a wider remit that considered changes to the DCC, centralising registration and some agent activities and changes to the smart Meters.

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.

7 Workgroup's Conclusions

The majority of the Workgroup agreed that the P302 Proposed Modification would overall better facilitate the Applicable BSC Objectives compared with the existing baseline and should therefore be approved.

The following table contains the Workgroup's final views against each of the Applicable BSC Objectives.

| Does P302 better facilitate the Applicable BSC Objectives? | | |
|--|--|--|
| Obj | Proposer's Views | Other Workgroup Members' Views ⁵ |
| (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"> Neutral – No impact | <ul style="list-style-type: none"> Neutral (majority) – as Proposer. Yes (minority of one) – 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. |
| (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. No (minority of one) – as the changes would increase complexity and are too soon. Neutral (minority of one) – not impacted. |
| (e) | <ul style="list-style-type: none"> Neutral – No impact | <ul style="list-style-type: none"> Neutral (unanimous) – as Proposer. |
| (f) | <ul style="list-style-type: none"> Neutral – No impact | <ul style="list-style-type: none"> Neutral (unanimous) – as Proposer. |



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]

(f) Implementing and administering the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation

⁵ Shows the different views expressed by the other Workgroup members – not all members necessarily agree with all of these views.

Panel's initial views on the Applicable BSC Objectives

The Panel unanimously agrees that P302 **would better facilitate Applicable BSC Objective (d)** for the same reasons given by the Workgroup in Section 7.

The Panel therefore initially unanimously recommends that P302 should be **approved**.

Panel's initial views on the draft legal text

The Panel unanimously agrees that the draft redlined changes to the BSC, BSCP504 and BSCP514 in Attachment A deliver the intention of P302.

Panel's initial views on the proposed Implementation Date

The Panel unanimously agrees with the Workgroup's recommended Implementation Date put forward under Section 5.

9 Report Phase Consultation Responses

This section summarises the responses to the Panel's Report Phase Consultation on its initial recommendations. You can find the full responses in Attachment C.

Summary of P302 Report Phase Consultation Responses

| Question | Yes | No | Neutral/ No Comment | Other |
|--|-----|----|---------------------------|-------|
| Do you agree with the Panel's initial unanimous recommendation that P302 should be approved? | 11 | 1 | 0 | 0 |
| Do you agree with the Panel that the redlined changes to the BSC deliver the intent of P302? | 9 | 1 | 1 | 1 |
| Do you agree with the Panel's recommended Implementation Date? | 9 | 3 | 0 | 0 |
| Do you have any further comments on P302? | 7 | 5 | 0 | 0 |

Views on the Panel's initial recommendations

All but one respondent agreed with the Panel's initial unanimous recommendation that P302 should be approved.

Views on solution or potential alternatives

The one respondent that disagreed with the Panel's initial view on approval was of the view that the solution was not optimal. They point out that as the DCC has not gone live, there is no experience of what would be the best way to carry out CoS under the DCC. They believe that as a result, there is likely to be a need for further changes.

One respondent, though agreed with the Panel's recommendation, didn't believe that the solution was the right one. They instead preferred the previous proposed solution, which we consulted on under the two Assessment Procedure Consultations. Part of the reason for this is that they believe that Supplier-Supplier provision of the Meter readings won't happen in a timely manner. They point to existing issues with the provision of the D0086 data flow as evidence for this.

Another respondent, who does agree with the views of the Panel, agrees with the view that the solution isn't optimal. They point to the lack of DCC engagement with the Workgroup when it considered the various solutions. The Business Process Design Group under the Smart Metering Implementation Programme considered a solution whereby the DCC takes a more proactive role. This was ruled out by the Department of Energy and Climate Change (DECC). It may be that if a centralised registration service is introduced, as is being considered for 2019 or later, then there will be an opportunity for a DCC-centric CoS solution.

Whilst there may be better solutions in the future, and further change cannot be ruled out, the Workgroup were of the view that change is required. The Workgroup identified that there is a risk that any differences between the old Supplier and new Supplier reads could

result in missing units not being included in Settlement. All but one of respondents agree with the Workgroup's view and initial unanimous views of the Panel.

Views on Applicable BSC Objectives

All respondents that agree P302 should be approved agreed that it better facilitates objective (d). Two respondents also believed that it facilitates objective (c). One respondent's rationale for P302 better facilitating Objective (c) was that it would enable tariff changes to coincide with CoS with minimal impact to the customer and supply, and direct ownership of the CoS process, while the other's rationale was that it will reduce the time it takes to complete the CoS process.

Views on the draft legal text and redlined changes

Only one respondent disagreed with the detail of the change as set out in the redlined changes to the CSDs. However, if some suggested clarifications are made, they would be supportive. Another respondent, who is supportive, highlighted an error in cross-referencing. We have incorporated the clarifications and correction in Attachment A. The changes are few and are clarifications only (no material changes). Therefore, no further consultation is required.

The respondent, which does not support P302, does agree that the draft legal text and redlined CSD changes reflect the intention of P302.

Views on the Implementation Date

Three of the 12 respondents disagreed with the implementation approach. One believes that the amount of system changes Suppliers are already having to implement means that the Implementation Date is too challenging to guarantee that the changes will, due to other industry changes, be implemented in time.

Another believes that the Implementation Date should be aligned with the DCC go live date and changes to add Meter Serial number to the DCC inventory. However, it was the conclusion of the Workgroup that there is no need for exact alignment, as long as the solution is in place before the DCC serviced Meters are operated. At the time the expectation was that P302 would be in place before the DCC go live date. As the DCC go live date is now April 2016, there may be a need for interim, manual processes until P302 is implemented. However, the expectation is that the number of Metering Systems impacted will be minimal, if any, until soon after June 2016. To manage this all be it small risk, we are looking at raising a CP to introduce an interim solution to manage the risk of reading differences resulting in missing units. Therefore, P302 doesn't need to be implemented before June 2016 and it should be in place before the expected operational use of the DCC.

The other respondent that didn't support the implementation approach is the same respondent that is against the change. They point to the Workgroup not being unanimous and in their view a need for further change. Therefore, they think that the Authority should reject P302, and for this reason do not agree with the Implementation Date.

The other nine respondents are supportive of the approach, with four of these noting the minimum 12 months for implementing system changes is necessary.

10 Panel's Final Discussions

Panel's views on the Applicable BSC Objectives

The Panel unanimously agrees that P302 **would better facilitate Applicable BSC Objective (d)** for the same reasons given by the Workgroup in Section 7.

The Panel therefore unanimously recommends that P302 should be **approved**.

Panel's views on the draft legal text

The Panel unanimously agrees that the draft redlined changes to the BSC, BSCP504 and BSCP514 in Attachment A deliver the intention of P302.

Panel's views on the proposed Implementation Date

The Panel unanimously agrees with the Workgroup's recommended Implementation Date put forward under Section 5 of 30 June 2015 as part of the June 2016 Release, if an Authority decision is received on or before 29 June 2015.

Panel's questions on the Draft Modification Report

The Panel asked whether Electricity North West's response on the issue for DSOs of receiving two D0086 data flows had been addressed. ELEXON advised that this was previously flagged up under the second Assessment Procedure Consultation and the Workgroup did not consider it an issue for consideration under P302. ELEXON noted that there may be a wide issue associated with DSO receiving D0086 data flows as now, as DSOs wouldn't necessarily know to expect a D0086 data flow. However, it advised the Panel that they would speak with Electricity North West.

The Panel Chair asked for clarification on the complexity introduced by P302. ELEXON advised that the perceived complexity is introduced by having two CoS processes, one for legacy and one for smart, which participants would need to use in parallel. However, P302 only considered the smart CoS processes and not the CoS processes as a whole, which may have developed a solution that worked for legacy and smart.

11 Recommendations

The BSC Panel recommends to the Authority:

- That P302 should be **approved**;
- An Implementation Date for P302 of 30 June 2016 as part of the June 2016 Release, if an Authority decision is received on or before 29 June 2015; and
- The BSC legal text and redlined changes to the CSDs for P302.

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 | 12 Aug 14 |
| Workgroup Meeting 3 | 12 Sep 14 |
| Workgroup Meeting 4 | 15 Oct 14 |
| Workgroup Meeting 5 | 07 Nov 14 |
| Second Assessment Procedure Consultation | 15 Jan 15 – 05 Feb 15 |
| Workgroup Meeting 6 | 13 Feb 15 |
| Workgroup Meeting 7 (teleconference) | 23 Feb 15 |
| Panel considers Workgroup's Assessment Report | 12 Mar 15 |

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Final Modification Report

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Workgroup membership and attendance

| P302 Workgroup Attendance | | | | | | | | |
|---------------------------|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Name | Organisation | 24 Jun 14 | 12 Aug 14 | 12 Sep 14 | 15 Oct 14 | 07 Nov 14 | 13 Feb 15 | 23 Feb 15 |
| 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 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ☎ |
| Claire Hemmens | SSE | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ☎ |
| Colin Frier | Siemens | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ☎ |
| Attendees | | | | | | | | |
| Jon Spence | ELEXON (<i>Design Authority</i>) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tim Kerr | ELEXON (<i>Lead Lawyer</i>) | ✓ | ✓ | ✗ | ✓ | ✓ | ✓ | ✗ |
| Rachel Hay | Ofgem | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ |
| Andrew Wallace | Ofgem | ✗ | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ |
| Laura Zielinski | npower | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ |
| David Rodger | Scottish Power | ✗ | ✗ | ✗ | ☎ | ☎ | ✓ | ✗ |
| Tim Newton | E.ON Energy | ✗ | ✗ | ✗ | ✗ | ✓ | ✓ | ✗ |
| Mark Young | First Utility | ✗ | ☎ | ✗ | ✗ | ✗ | ✗ | ✗ |
| Dennis Palmer | Smart Energy GB | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | ☎ |

Appendix 2: Estimated Progression Effort

The following tables contain the estimated effort in progressing P302:

| Assessment Effort | |
|-------------------|-------------------|
| Participant | Effort (man days) |
| ELEXON | 25 |
| Workgroup members | 114 |
| Total | 139 |

| Consultation Response Effort | |
|--|------------------|
| Consultation | No. of responses |
| First Assessment Procedure Consultation | 11 |
| Second Assessment Procedure Consultation | 10 |
| Report Phase Consultation | 12 |
| Total | 33 |

Appendix 3: Glossary & References

Acronyms

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 |
| BST | British Summer Time |
| CoS | Change of Supplier |
| COSEG | Change of Supplier Expert Group |
| CP | Change Proposal |
| DCC | Data and Communications Company |
| DECC | Department of Energy and Climate Change |
| DSO | Distribution Systems Operator |
| DTC | Data Transfer Catalogue |
| DUGIS | DCC User Gateway Interface Specification |
| EAC | Estimated Annual Consumption |
| MPAS | Meter Point Administration Service |
| 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 |
| PARMS | Performance Assurance Reporting and Monitoring System |
| SMETS | Smart Metering Equipment Technical Specifications |
| SMRA | Supplier Meter Registration Agent |
| SPAA | Supply Point Administration Agreement |
| SSC | Standard Settlement Configuration |
| SSD | Supply Start Date |
| TPR | Time Pattern Regime |
| UNC | Unified Network Code |
| UTC | Coordinated Universal Time |
| WD | Working Day |
| XML | EXtensible Markup Language |

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 |
| D0260 | Notification from MPAS of Old Supplier Registration Details |
| 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, 20 | CP1395 page on the ELEXON website | https://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 on the Ofgem website | https://www.ofgem.gov.uk/publications-and-updates/open-letter-reforming-change-supplier-cos-meter-read-process-smart-electricity-meters |
| 7 | Issue 53 page on the ELEXON website | http://www.elexon.co.uk/smg-issue/issue-53/ |

| External Links | | |
|----------------|--|---|
| Page(s) | Description | URL |
| 8 | MAP 08 document on the MRA Agreed Procedures page on the MRA website | http://mrasco.com/admin/documents/MAP08%20v3.1%20-%20The%20Procedure%20for%20Agreement%20of%20Change%20of%20Supplier%20Readings%20and%20Resolution%20of%20Disputed%20Change%20of%20Supplier%20Readings.pdf |
| 9 | BSC Section page on the ELEXON website | https://www.elexon.co.uk/bsc-related-documents/balancing-settlement-code/bsc-sections/ |
| 9 | BSCPs (BSCP504, BSCP514) page on the ELEXON website | https://www.elexon.co.uk/bsc-related-documents/related-documents/bscps/ |
| 12 | CP1388 page on the ELEXON website | https://www.elexon.co.uk/change-proposal/cp1388/ |
| 22 | Smart Change of Supplier Meter read working group page on the SPAA website | http://www.spaa.co.uk/committees-groups/detail?committeeid=206303 |
| 24 | Consultation on DCC go-live date. | http://www.smartdcc.co.uk/media/14108/141117_dcc_plan_and_im_consultation.pdf |