Background

1. During the Blueprint Phase we examined the current business processes for agent appointments and considered ways in which they might be made more effective. A specific concern was that the existing processes involve a significant number of data flows which – if not performed correctly - can result in errors which undermine the reliability of switching. Because the time to complete a switch is typically 14-21 days, further questions were raised as to whether the existing arrangements would support next day switching.

2. In RP2 and the DLS Design Assumptions the proposals in relation to agent appointments were as follows:

   a) Supplier Agents whose lifecycle coincides with a Registration should be submitted to CSS on a Switch Request. These agent types are:
      i. Gas Shipper – although not technically a Supplier Agent, the Shipper ID needs to be in place from the Switch Date and would be mastered within the CSS
      ii. Metering Equipment Manager (formerly MOP/MAM) – this would also be mastered in CSS
      iii. Data Collector / Data Aggregator – because of the complexity of appointment rules (e.g. need for alignment between the type of DC and the Measurement Class of the RMP) it was proposed that the DC would be part-validated by CSS (i.e. is the ID code valid?) and passed to MPRS for full validation. DC and DA would be mastered by MPRS

   b) Agents whose lifecycle coincides with the asset lifecycle should be mastered by MPRS or UKLink. These agent types are:
      i. MAP – the agent ID would be updated when a meter is installed or removed or when a portfolio of meters is transferred between MAPs
      ii. MCP – the agent ID would be updated when the comms to a meter is installed or changed

   c) Notices of a switch would be issued at Switch Confirmation and Switch Execution. These notifications would be available to gaining and losing Energy Suppliers, Gas Shippers and Supplier Agents
d) Changes to a Supplier Agent which are not related to a Switch would be processed by the system responsible for mastering that data entity. For Gas Shipper and Metering Equipment Manager this would be CSS: for all other Supplier Agents it would be UKLink or MPRS

**Issue**

3. At a DLS Design Forum meeting on 8 May, the (large) suppliers present expressed the view that all types of Supplier Agent should be processed in the same way (i.e. to avoid a situation where CSS masters some agent IDs and MPRS/UKLink masters others). The stated preference of the attendees was for all agent appointments to be handled using the existing systems and business processes (i.e. MPRS and UKLink plus DTN, iX or internal dataflows). This would represent a change to the positions documented in RP2, as summarised above.

4. It was noted at the meeting that the situation in electricity is more complex than that in gas as a wider range of agents is involved and there are more restrictive arrangements in terms of which agents are authorised to operate different types of MPAN (i.e. HH, NHH, unmetered).

5. This paper re-visits the analysis that led to the positions proposed in RP2 and considers alternatives that might be adopted.

**Background**

6. The current arrangements for agent appointments in electricity are presented at Appendix 1 and summarised as follows:

   a) As required by the supplier hub principle, the Gaining Supplier issues appointment notices to the Supplier Agents they wish to appoint following a Switch. Where relevant (e.g. for a MOP) the appointment notice includes information which instructs the Supplier Agent how they are to manage the Meter Point (e.g. as HH, NHH or unmetered) and a reference to the contract that work is to be performed under. In addition the appointment notice includes the agent ID of the relevant losing Supplier Agent.

   b) Each Supplier Agent responds to the appointment notice with a confirmation or rejection.

   c) In some cases the gaining Supplier Agent then requests information from the losing Supplier Agent – for example the gaining MOP requests meter technical details.

   d) The Gaining Supplier is responsible for updating MPRS with the agent IDs for the Supplier Agents it has appointed.

   e) Data Collectors are responsible for collecting the Switch Read and for submitting it to the gaining and losing Energy Suppliers so they can agree the read to be used on closing and opening bills and for settlement.

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1 Where a supplier uses an ‘in-house’ agent (i.e. an agent belonging to the same parent company as the supplier), instructions do not need to be communicated using an external network (e.g. DTN) but can be passed using an internal communications network.
7. The current arrangements for agent appointments in gas are presented at Appendix 2. They are similar to those in electricity, with some key differences as follows:

a) Switching is currently driven by the Shipper. In future it will be led by the Gas Supplier
b) For domestic customers, the Losing Supplier is required to provide data directly to the Gaining Supplier on a NOSI flow\textsuperscript{2}. This allows the Gaining Supplier to check that the data recorded on UKLink (e.g. address, meter details, meter read) are aligned with data held by the Losing Supplier (e.g. to confirm that the Losing Supplier has not replaced the Meter but failed to update UKLink). The NOSI flow is triggered by the Losing Supplier when they receive a loss notice from the losing Shipper
c) Switch Reads are provided by the Gaining Supplier to the gaining Shipper who passes them to UKLink. In turn UKLink issues them to the losing Gas Shipper who forwards them to the Losing Supplier. If no Switch Read is received within a specified period Xoserve estimates the Switch Read and issues it to both sets of Gas Shipper and Gas Supplier

Analysis

8. Work to date in DLS has exposed some challenges in implementing the policy positions set out in RP2, for example:

a) Metering Equipment Manager / MOP: in electricity the MOP is appointed to perform different activities depending on characteristics of the Meter Point (e.g. HH or NHH metered or unmetered). MPRS validates the MOP's accreditation against the Meter Point and rejects the agent ID if the agent accreditation does not match that of the Meter Point (e.g. a NHH MOP being proposed for a HH site). This had not been fully understood during Blueprint when it was assumed that validation would only involve testing that the agent ID was a valid code
b) Notifications and data exchanges: the expectation in RP2 was that notifications at Switch Confirmation and Switch Execution would inform the gaining and losing parties of: their appointment / de-appointment to a specified Meter Point; the Switch Date; and the IDs of the other parties (gaining and losing) involved in the Switch. Discussions in the User Group and EDAG (during the Blueprint Phase) had indicated that these notices might replace the existing appointment / de-appointment flows. Investigations during DLS have identified the legacy notifications and data exchanges are more complex (and include exceptions handling where, for example, an appointment is rejected). For electricity they comprise:
   i. D0155 data flows from the Gaining Supplier to the MOP and DC to appoint the selected agents. These flows include data items such as:
      - A reference to the contract under which work is to be performed

\textsuperscript{2} The NOSI flow is also used in electricity.
- Information on the type of metering
- Specification of how the Meter Point is to be treated in settlement

ii. D0148 data flows from the Gaining Supplier to the MOP and DC to notify them of the identities of the current agents. For the flow to the DC this includes identification of the DA (current and historical – to specify to which DA the DC should send readings for each settlement run)

iii. D0150/D0149 data flows from the losing MOP to the gaining MOP and then to the Gaining Supplier, containing the meter technical details

9. In general, responses from Supplier Agents to the RFI have not attributed significant benefits to the notifications they would receive from CSS. The exception to this is MAPs who have argued for a long time that lack of information on Switches makes it impossible to track their assets and bill the correct supplier for their use. As a consequence MAPs incur write-offs which could be avoided if they were notified of Switches. The new benefit estimated by MAPs in their RFI responses was £850k over 15 years\(^3\).

10. Smart meters record tariff configurations and other data set by the Energy Supplier or pre-loaded by the meter manufacturer. This data may be retrieved remotely thus avoiding the need for parties to exchange information that has been manually recorded and captured in their systems. As the roll-out of smart meters proceeds there will be a diminishing need for Energy Suppliers and Supplier Agents to exchange meter data when a customer switches their Energy Supplier.

11. Following analysis of the RFI issued in January 2017, the programme developed a new reform package – named RP2a. The principal change introduced in RP2a was a shift in the objections window to 1WD for domestic customers and 2WD for non-domestics. In addition RP2a included the option of all agent appointments being managed through the legacy systems (i.e. MPRS and UKLink).

**Options – Agent Appointment Process**

12. The options available fall into three principle cases, although variations on these options could be explored. Under all options, the approach to appointing the Gas Shipper would be for the Gaining Supplier to include the Gas Shipper ID on the Switch Request and for CSS to validate and master this data item. The main options are as follows:

a) Option 1: RP2 position (as set out in the DLS Design Assumptions) – CSS masters the Shipper and MOP ID and performs pre-validation of DC and DA (which are mastered by MPRS): MOP, DC and DA IDs would be submitted on the Switch Request. Notifications would be made available to all gaining and losing parties at Switch Confirmation and Switch

\(^3\) This is only based on responses from a small number of MAPs and is therefore expected to under-estimate the eventual benefits.
Execution but there would be no regulatory requirement for parties to act on these notifications. Meter technical details and contractual references are exchanged using legacy data flows, under the supplier hub principle.

b) Option 2: all Supplier Agents are mastered in CSS – all agent IDs (MOP, DC, DA, MAP and MCP) would be mastered in CSS applying validation rules replicated from MPRS and UKLink (i.e. including checking the role to be performed by the agent – e.g. HH or NHH). Notifications to the gaining and losing Supplier Agents would replace the legacy appointment/de-appointment data flows but meter technical details would continue to be exchanged bilaterally using legacy data flows.

c) Option 3: all Supplier Agents are mastered in MPRS or UKLink – CSS would master the Energy Supplier and Shipper IDs and no agent IDs would be submitted on a Switch Request. The losing agents (including the MAP) could be notified of the switch, and the identity of the Gaining Supplier (and – for gas – the Gaining Shipper), but it would not be possible to notify them of the Supplier Agents appointed by the Gaining Supplier.

13. Both Option 2 and Option 3 offer clarity to Energy Suppliers by focusing all agent appointment activities on one system: either CSS (Option 2) or MPRS/UKLink (Option 3).

14. Option 2 represents a significant expansion of the scope of RP2 involving changes both to CSS – to build in the appointment / de-appointment functionality and full validation of agent ID and role – and to MPRS/UKLink, to either remove or switch off the existing functionality. This option would offer the benefit of allowing notifications to be issued promptly – thus minimising the risk that Supplier Agents are not appointed by Switch Date.

15. Option 3 represents minimal change to the existing arrangements and a reduction in the scope and cost of CSS as compared to RP2\(^4\). It would rely on Energy Suppliers following the supplier hub principle and taking responsibility for all agent appointments / de-appointments and ensuring that information is exchanged between agents. To assist all parties there may be merit in including a list of losing agent IDs in the notifications issued to them at Switch Confirmation and Switch Execution. To ensure that the legacy processes are fit for purpose in the context of next day switching, changes would be required to the time periods allowed to complete various actions but – as now – agent appointments and data exchanges between parties could take place after the switch has been executed.

Conclusions: Agent Appointment Process

16. Large suppliers that attended the Design Forum favoured Option 3 on the grounds that:

\(^4\) Responses to the RFI issued in respect of RP2a revealed that removing this functionality from RP2 would reduce NPV costs over the assessment period [2018 – 35] by £17.2m.
There would be consistency across all agent types that appointment / de-appointment actions would be mastered in MPRS and UKLink: CSS would play no role in the appointment process or the exchanges of information between Energy Suppliers and Supplier Agents.

No functional changes would be required to Energy Suppliers’ internal systems and processes for managing Supplier Agents and the data flows between them, although some changes to timing and/or orchestration may be required to facilitate next day switching.

The changes they would be making to their systems under RP2 would allow them to appoint / de-appoint agents within a next day timeframe, where required. Suppliers would be responsible for ensuring these processes are completed but in some cases they may choose to carry the risk of a delayed appointment rather than delay the switch.

Based on work during Blueprint and DLS to date, we understand that:

The processes for appointing MOPs are more complex (in electricity) than previously understood.

The supplier hub principles already place responsibilities onto Energy Suppliers for managing their Supplier Agents and for ensuring that they – and their agents – have timely access to information that is required to manage the Meter Point (i.e. from an operational, billing and settlement standpoint).

The roll-out of smart meters will reduce the reliance on MOPs to exchange Meter information at a Switch. This is because the Gaining Supplier will be able to access much of this data from the DCC Inventory or direct from the smart meter: they will also be able to re-configure smart meters remotely, reducing the number of cases where meter characteristics prevent them from offering a specific tariff to the Customer.

Including the mastering of MOP IDs in CSS was starting to introduce complexity which might increase the cost estimates for RP2. Removing agent IDs from the Switch Request will simplify the development of CSS, leading to a reduction in the costs incurred by DCC, suppliers and agents.

Based on the above we propose to pursue Option 3 and remove any appointment functionality from CSS. The implications of this for RP2a are:

Suppliers will continue to appoint / de-appoint Supplier Agents using legacy arrangements.

All agent appointments will be mastered in MPRS / UKLink. This comprises:

- Meter Equipment Manager (MEM) - previously the MOP in electricity and part of the MAM role in gas
- Meter Asset Provider (MAP) – currently recorded in ECOES in electricity and consolidated into MAM in gas
- Data Collector (DC) and Data Aggregator (DA) in electricity

Relevant agent appointments will be reflected in CSS.
d) The incumbent agents will be notified at Switch Confirmation and Switch Execution but will not be required to execute any specified actions as a result.

Options: Metering Comms Provider (MCP)

19. The inclusion of MCP ID in RP2 reflected discussion during the Blueprint Phase about some of the issues associated with the transfer of communications services when a switch takes place. It was noted that MPRS / UKLink had been modified to record whether a smart meter was served by DCC or an SMSO and that this would help suppliers to manage a smooth handover of a smart meter when a switch takes place.

20. The introduction of an MCP agent ID was predicated on the hypothesis that clear identification of the party providing communications to AMR, half-hourly and other meters would allow customers with these meters to receive a similarly smooth handover. In some circumstances it could also avoid the need to replace communications services or equipment when a switch takes place.

21. In our analysis of MCP the following issues have been identified:
   
a) There is considerable variation in the way that comms services are provided: in some cases the MOP/MAM takes the lead, in others a network or SIM provider would be identified and other circumstances are similar to the SMSO arrangement for SMETS1 meters
b) These meter types are generally installed in non-domestic premises where many customers are more sophisticated and likely to have a better understanding of the steps involved in changing the comms arrangements at switching. They are also less likely to request a faster switch than domestic customers as their procurement processes are typically more rigorous
c) The number of meters in these categories is low – only 1-2% of the total number of meters

Conclusions: Metering Comms Provider

22. Based on this analysis we propose that MCP ID is not captured for all meter points with communicating meters. The DCC flag and the SMSO ID would still be captured, as currently, in MPRS/UKLink.
Appendix 2 – Interaction Sequence Diagram for Gas (Legacy Arrangements)