

Response to DCC Price Control Consultation

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Ofgem's consultation on the method of regulating DCC is welcome. It comes at a time when the supply industry faces huge political and regulatory uncertainties. The smart meter program can transform the industry in a positive way. However the complexity of the program and the central role of DCC to its delivery, are both major risks that can have an adverse impact the energy customer's bills. Ofgem's oversight of the costs and hence prices of DCC is therefore welcome.

The operating cost of smart meters that Suppliers will incur for smart meters through DCC will be yet another regulated cost for Suppliers. One needs to bear in mind that Suppliers today incur costs for operating legacy meters that they procure on a competitive basis and are free to procure internally from service contractors based on a value-for-money judgment. As a result of this, there is a very competitive industry for metering related services that has, over the years, become quite efficient and productive. This has helped Suppliers not only to bring their costs down but has also allowed new Suppliers to tap into this expertise without having to develop their own. With DCC as a regulated monopoly, this opportunity for Suppliers to drive savings through competition on metering services will disappear; all Suppliers will bear the cost from a single national monopoly. Under these circumstances, Ofgem's price control regime becomes even more important and must be driven by the best interest of customers. One would expect that DCC's part of operating costs not to exceed the cost of dumb meters today – at least an outer benchmark!

Competition in supply relies on Suppliers innovating in customer service to become more efficient and therefore being able to offer a lower price. Cost-to-serve represents ~13% of the customer's energy bill (this figure is slightly lower for small suppliers) the rest being wholesale energy and regulated costs of network and environment costs. Of this 13%, about 1/3rd will end up directly or indirectly as yet another regulated cost.

While this Ofgem consultation is about DCC Price Control, it is also very important to understand the costs imposed by DCC on Suppliers indirectly. These costs will not show up within the DCC price control regime because they are costs incurred by Suppliers as a direct consequence of the quality of service provided by DCC or because DCC has passed these costs to Suppliers. Ofgem, bearing its overarching goal of customer protection in mind, must also take a view on what these costs are and whether these costs should justifiably be borne by DCC under the price regulation or borne by DCC shareholders.

1. DCC program delay and its impact on supplier costs: DCC has failed to meet its program goals and is unable to start its service on the promised date. It has not yet announced its final view on program completion but either of July 2016 or October 2016 were the alternatives on their announced consultation. Suppliers are facing and will face increasing costs for their part of the program as a consequence of this delay. These costs increases are in the following areas:
 - a. Installation costs: Since the statutory deadline of 100% meters by 2020 cannot be changed, Suppliers face the prospect of a much shorter timeframe. This is already pushing up costs of smart meter installation (already above the DECC Impact Assessment figures). The industry is

now expected to do in four years what it had always said will take five years. As installation demand ramps up, the short installation capacity will push prices further up. While it is hard to determine whether DECC got their installation cost estimates wrong and what the impact of the delay will be, Suppliers will certainly face an higher installation costs because DCC is late.

- b. Cost of IT systems: Supplier IT systems are an expensive and many suppliers have already commenced development of these systems. Delays to the DCC program are inevitably going to increase the cost of these systems.
 - c. System integration costs: The main effect of the DCC program delay will be the reduction in time for system integration tests. Given the complexity of the solution, it is highly likely that different meter manufacturers will achieve complete SMETS-2 compliance and device level inter-operability at different times and some may not achieve it completely. This may reduce meter choice for Suppliers because of fewer qualified manufacturers on the one hand and capacity limits on the other.
2. Other costs incurred by Suppliers:
- a. DCC service quality will determine cost of smart installations: The speed (and therefore cost) of a smart meter installation depends entirely on the communications service and the IT process that supports an installer at site. Not much is known about the design of this service or its support from DCC. What is clear however, is that only an installer-friendly hub design and an excellent installation support service will keep costs down.
 - b. Cost of assets: DCC has contracted by CSPs to provide communications hubs. This is the biggest part of the DCC spend. Cost indications by DCC already place the cost of hubs to be higher than envisaged in the impact assessment. Suppliers will procure meters competitively but now to a more complex GBCS specification. For the program to realize its cost benefit goals, this aspect must be brought in control.
 - c. Annual operating costs – reliability of hubs: DCC has published terms & conditions covering different charges relating to the return and repair of hubs by Suppliers. In normal commercial contracting, including contracts for providing meters, such terms & conditions are not generally seen. Energy Suppliers, as buyers, agree with their vendors, terms, usually of the buyer's choice and built around the buyer's operating processes, with a view of covering fair risks in the Supplier using the vendor's devices for its customers. With DCC, the boot is on the other foot – i.e. Suppliers, who are the buyers in this instance, are being forced to accept terms by DCC that suit it's costs and regulated business rather than providing its customers, the Suppliers, the terms that work for them. This way, costs that Suppliers would expect their vendor to carry, will end up with Suppliers.
 - d. Costs passed to others: Energy Suppliers would expect their meter vendor to deliver product to specified warehouses as per an agreed logistics schedule, the vendor bearing costs of freight. In the case of DCC, freight is now a Supplier's cost. Similarly, when operating meter supply contracts, Suppliers typically provide 6 months visibility of demand to meter vendors with only 3 months firm and the rest on a framework (i.e. no consequences if the projected demand is not picked up). When the

meter industry can operate with this kind of demand visibility, by demanding long-term forecasts and 6 months firm demand, the DCC is passing risks from the supply chain to Suppliers with no commensurate benefits.

Question 1: What are your views on our approach to assessing DCC's costs? And, do you have any suggestions on where we can improve our approach?

Approach:

Ofgem has relied on the competitive bidding process by which DCC and its component contracts for DSP and CSPs were placed. This, in the present context is a realistic approach but it does not recognize the full extent of the effect on Suppliers.

All bidders knew they were bidding to become a price-regulated monopoly with regulation placed in the hands of Ofgem, a body with little experience of regulation of IT businesses. It is reasonable to expect that bidding behaviour reflected this reality. All bidders were aware of the technical complexity in the program. In such a situation, rational bidders would have skewed the pricing to be lower with technical risks covered under the garb of 'change to cover change in scope'. Indeed the scope of DCC was expanded, post contract, to include the addition of SMKI and Parse & Correlate. To that, only the addition of costs directly related to such expansion should be allowed. Any costs for 'change notes' because of change to GBCS specifications should have been anticipated by the bidders and cost increases or delays on this count should not be permitted. The metering industry too is required to comply with the same GBCS and since it is competitive, one would not expect device costs to rise substantially because of GBCS. Why then, should cost increases be permitted for a regulated monopoly? If they are, it is purely a monopoly rent.

Hubs were procured by an open competitive bidding process concluded by DECC, in Q3 2013. Commercial supplies of hubs from the CSPs will only commence in late 2016. This big time gap almost completely vitiates the strength of competitive pressures at the time of the bidding. In the competitive commercial world of smart metering, communications providers begin supplies, even of bespoke devices, in a much shorter of between 6 and 12 months (9 months typical). We disagree with Ofgem relying on the DECC competitive process as the sole means of judging CSP costs. Commercial contracts with CSPs and their contractors are set in the regime of a monopoly supplier (i.e. after contract award) and a) should not be allowed escalation because of the technical uncertainties and b) deserve closer examination because of the delay.

Improvement to approach:

DCC is a unique regulatory problem in that it has both its gestation period and its useful lifetime covered by price regulation. During the gestation period all the major costs that will drive the operating costs will be determined. It is the costs during the gestation period that will determine the service costs to be paid by Suppliers and ultimately by the customer over the operating lifetime. This probably calls for two different regulatory approaches by Ofgem, one for the gestation period and a second for its operating life.

During the gestation phase of regulation, Ofgem needs to take a view not only on the costs of DCC as a regulatory issue but also on the quality (content, timeliness etc.) of DCC's work as it impacts the total cost for the

supply industry. There seems to be no incentive in the DECC contracts for DCC to provide the energy supply industry with an efficient and low cost service, if there is, there seems to be no visible evidence of it in the DCC performance so far. It seems the contract was taken in the knowledge of big technical risks (e.g. GBCS) and the expectation that these will be managed by cost compensation for 'change notes'. Ofgem can, by taking a more customer centric view to regulating the DCC, provide that incentive. During the gestation period, an ex ante approach maybe on a six-monthly basis, though more expensive, may be more appropriate.

Once the service is up and running, Ofgem can and should apply the ex ante approach, as it does for networks.

Price regulation is best conducted on the overall costs of DCC as compared to the LABP. Ofgem can help achieve greater comprehension and transparency by publishing DCC's submissions and its own determinations on a per customer or per household basis.

Question 2: What are your views on our assessment of DCC's performance against the IMs?

The assessment, given the contract milestones, made by Ofgem is possibly fair. It is worth noting however, that the milestones achieved in the review period are either internal to the set-up of DCC nor do they have to do with the production of documents, the quality and effectiveness of which remain as yet unproven. Unless quality focused benchmarks are set and reviewed as an integral part of this regulatory exercise in the initial (pre-commissioning) period, a mere time based assessment of milestones will be misleading. Ofgem should review data on the number of revisions, the significance of revisions and the reasons from revisions to these documents before making a final judgment on whether the milestones have been achieved. Based on this quality assessment, Ofgem should change any view taken earlier and should be able to make margin adjustments retrospectively for poor quality.

From the IM review section (paragraphs 3.14 & 3.15) of the consultation document, it seems Ofgem is obliged to accept clearly set out milestones approved by the Secretary of State as part of the overall delays to the DCC program. Ofgem needs to recognize that the energy supply industry is incurring costs waiting for DCC and these costs were based on an expectation of delivery by DCC. While, for price regulatory purposes, Ofgem's stance on achievement of milestones is the only way, some reference must always remain to the original milestone dates because it is reflective of DCC's impact on the rest of the industry.

Question 3: Do you have any observations from the current incentive framework which can inform early thinking on developing an enduring framework?

The key question is the incentive framework during the gestation period for DCC to keep overall set-up costs down. There seems to be none and a 'change note' based contract regime is increasing costs. While the Ofgem consultation document and DCC's own statements place the cost increase at 3.8% of the program cost, the actual spend to date is a very significant increase over the budgeted spend to date. Separating the LABP between the gestation phase and delivery phase will reveal true progress of the program set-up costs (even though this is intended in the cost reporting forms).

Incentives (and maybe penalties) are needed for DCC to keep the gestation period costs really low because for an IT enabled service, costs are direct function of the set-up costs and service use. The higher the numerator, the higher the cost will be.

It is also important to assess the service cost on business performance metrics. If the service is badly designed, the frequency of use of the service to perform the same business function can be high, making the cost per service use appear low whereas the overall cost to the business is quite high (multiple service calls needed to achieve the same business goal). It is recommended that Ofgem seek costs on a 'per dual-fuel household' basis to really understand the direct contribution by DCC of a supplier's cost-to-serve.

Question 4: What are your views on our proposal?

The proposed numbers are small. In the context of it being a partial year of the gestation period, Ofgem can do little more than set some markers at this stage. To that extent, Ofgem has done the best it can.

Question 5: Do you have any views on how the methodologies used for networks could be applied to DCC in future?

Once DCC is in the delivery phase, the approach applied to networks is ideally suited to the regulation of DCC. DCC will need exactly the same challenges as apply to networks on the justification of capital expenses whether for expanding system capacity or renewal of infrastructure. An *a priori* justification of such expenditure seen in light of recent performance levels should enlighten price reviews. Ofgem will need to tread a careful path to prevent DCC from 'gold plating' its infrastructure beyond the core needs of the business (something they have already competitively bid for). One would expect DCC would also desire to develop a framework of services to fall outside the regulated business. Again, Ofgem have sufficient wisdom and experience in dealing with costs for this tricky area.

Question 6: We are looking for ways to benchmark DCC costs. What other sources of data or potential comparators can you recommend for subsets of DCC costs.

Gestation period & costs: While it is impossible to find a completely like-for-like example for the service provided by DCC because of scale or complexity, one does seek references for a typical time and cost for setting-up and commissioning a smart meter data service. In the hands of experienced smart metering technology operators, it typically takes 9 months to commission and another 12-18 months to iron out systems integration issues. In this spectrum are well-run programs that settle even within 12 months and badly-run ones which do not settle even in 60 months. Ofgem may seek evidence from companies experienced in providing communications and data infrastructure such as Trilliant, Itron, SilverSprings etc. who have extensive experience on such projects to get some benchmarks.

Communication hubs: By far the biggest cost in the DCC cost build-up is the cost associated with providing communications hubs. There are two elements to the DCC cost of providing these hubs viz. the 'price' of the hub and finance costs since they are being charged to Suppliers at a per day rental. The design and production of the hub has been contracted out by the CSPs to contractors who will make a margin on supply. The CSPs will then

set a 'price' for these hubs for Suppliers after adding a margin for themselves. This 'price' is the basis on which the rental charges will be based.

The hub is a physical device and it should be possible to get benchmark costs from meter or contract manufacturers for its cost. This will establish the fair cost to producing hubs.

The 'price' at which they are financed (for rental purposes) will be a function of the terms of the contract agreed between the CSP and its contractor(s) on the one hand and the contract between DCC and the Suppliers on the other. Terms such as warranties, design life, repair services etc. all impact price and fair price is determined based on where the risks lie. This is what happens in case of contracts between meter manufacturers and Suppliers and there is no reason why it should be any different for CSPs. The balance of risks between CSPs and Suppliers should be assessed and cost mark-ups allowed for the 'price'. Ofgem have, at present, taken a superficial view that since these contracts were procured competitively, they must be priced right. We would challenge that view and suggest that Ofgem dive much deeper into these contracts and assess whether they are commercially balanced. A simple comparison with meter contracts (which are not in a monopoly) will establish a benchmark. [Contract electronics manufacture is a well-established practice in the electronics industry. Such contracts include incentives for the contractor to improve productivity, achieve better buying etc. so that in the short and medium terms the principal sees the benefits from reduced contractors pricing.]

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SMETS-1 and SMSO: Finally, a good benchmark for the overall DCC service is the Smart Meter Service Operator (SMSO) service associated with SMETS-1 specification meters. SMETS-1 meters provide all the user experiences that SMETS-2 devices will provide. The SMSO service too does exactly what DCC expects to do. This, then, provides an excellent benchmark for DCC's communication hub hardware on the one hand and its communications & data services on the other. SMSO is currently performing at much lower volumes compared to DCC, so some volume related adjustments to their performance levels will be needed to make them comparable.

There is more than one SMSO in operation and their set-up costs are behind them. A fair assessment of these set-up costs, adjusted for scale, can make a useful benchmark for DCC set-up costs.

There are at least three meter-manufacturers who have supplied SMETS-1 meters with communications hubs. The price for communications hubs should therefore be easy to obtain.

A large number of SMETS-1 meters have been financed through Meter Asset Providers. The MAP rentals can provide an effective benchmark for the cost of finance MAPs are charging Suppliers.

Longer term, the industry would benefit from the DCC and its component service providers facing competitive pressures. SMSO services should be allowed to continue, if for no reason other than the fact that they provide a strong like-for-like competitive benchmark for DCC.

Question 7: What are your views on DCC's approach to the prudent estimate?

The prudent cost estimate for the regulatory year 2013/14 is not of much commercial consequence because it was a partial year covering the start-up phase.

The industry generally has been seeking greater transparency (refer ECCC hearings) in the workings and risk management of DCC. To the extent that prudent estimates are a predictor of future costs, they provide a level of visibility and support the cause of transparency. There is however, a risk of prudent estimates becoming a self-fulfilling prophecy that Ofgem needs to cover.

Prudent estimates for price regulation purposes are, however, of dubious value in the long run. In the gestation period, though, they may have regulatory value, particularly if they become the basis of a half yearly ex ante regulation regime.

Question 8: Do you agree that our proposals should take effect from April 2015/16?

No comment.

Question 9: Do you agree with our assessment against the criteria in the licence?

There is little doubt that the uncertainties around DCC costs remain. It is possible that given the complexity of the program, costs will go up. All the cost increases seen to date have come from a) an increase of scope to include SMK1 etc. and b) the failure of DCC and its contractors to predict with the technical complexities of the program, particularly GBCS.

As stated earlier, the meter industry is also required to comply with GBCS but because it is competitive (and not a monopoly), it will be impossible for manufacturers to pass the entire cost of compliance with GBCS to Suppliers. Were DCC an efficient service subject to competition, it too would not have done so.

Question 10: What are your views on our longer term strategy of moving towards a more ex ante price control? How might this be achieved?

See above.

An ex ante approach separated between the gestation phase and the delivery phase is the best way to go. It can be achieved by restating the LABP into these clearly defined phases so that planned costs are appropriately separated. For the gestation phase these can be further broken down into the costs cumulative to the achievement of the main contractual milestones.

The actual gestation phase costs can then be assessed against contract milestones both in time and quality. Costs caused by poor quality or timeliness can be assessed from the variation and disallowed. This makes

the gestation phase regulation harder and also calls for expertise Ofgem may not readily have. However, a lot of transparency and control can be achieved by getting the relevant expertise and experience to bear on DCC price regulation at this critical phase of the program.