

Executive Summary

1. It is critical that the price cap methodology introduced by Ofgem recognises the artificial competitive distortion created by small supplier exemptions. We urge Ofgem to press the Government to remove these distortions at the earliest opportunity.¹ In any event, to meet Ofgem's obligation to ensure suppliers can finance their operations sustainably, the cap must be set at a level that allows fully obligated suppliers to recover these costs. We therefore support Ofgem's view that this is the approach it expects to take.
2. The costs of smart meters are not covered in this paper, nor any of the other working papers published by Ofgem. This is a significant omission. We believe that Ofgem will need to request further information (in addition to the recent RFIs and to the data collected by BEIS) to be able to appropriately identify and estimate the net smart meter costs. Smart meters are identified as an important factor in relation to the removal of the cap and Ofgem should be considering them carefully now to ensure that the will of Parliament, including that the cap being temporary, can be met.
3. We set out the data we believe Ofgem needs to collect to ensure that the cap reflects accurate smart metering costs in Annex 1 to this response. This data will need to be collected before Ofgem can reach a view on the appropriate initial level of net smart costs and the associated indexation, whatever methodology Ofgem uses to set the cap.
4. As we have said elsewhere, we are hampered in our ability to respond to this working paper by the fact that responses to earlier documents have not been published. We urge Ofgem to be more transparent in this process, so that we can assess all the evidence on which Ofgem is relying.

Renewables Obligation

5. Working Paper 4 (WP4) states that suppliers have some control over the cost of the Renewables Obligation (RO), with the implication that benchmarking may be appropriate for this category of cost. However, looking forward, the expected net costs of complying with the RO through the purchase of ROCs, or through the payment of the buyout price, will be equivalent.
6. Any variations in the costs of meeting the RO will therefore only result from random movements in ROC prices over the compliance period (that reflect updated views of the expected value of the buyout fund). Benchmarking such costs would not give a view of relative efficiencies between suppliers. Instead, a calculated "benchmark" would instead merely follow a lower envelope of ROC costs that no supplier could sustainably achieve.

¹ Ofgem highlights the distortions that policy cost exemptions cause on page 6 of its recent response to the National Infrastructure Commission's consultation on the National Infrastructure Assessment. https://www.ofgem.gov.uk/system/files/docs/2018/02/ofgem_national_infrastructure_assessment_response_1.pdf

Energy Company Obligation

7. Ofgem suggests it may be possible to benchmark an “efficient” level of ECO costs. However, as we stated in our response to WP1, using historical costs will not create a meaningful benchmark: ECO3 will differ so materially to previous iterations of the scheme that suppliers’ historic costs will be meaningless. In any case, even if ECO was not being amended, any attempt to benchmark costs at a point in time would be misleading due to the ability of suppliers to phase their spending differently.
8. In addition, under certain options that Ofgem has set out for determining the cap (in particular “Option 2” and “Option 3”), Ofgem will need to identify historic ECO costs and remove them from estimated benchmarks before replacing it with the costs associated with ECO3. WP4 (and associated WP5) are both silent on the issue of how Ofgem intends to do this in practice.

Legal and process considerations

9. Legal considerations regarding WP4 are set out in Annex 2 to this response, but in summary:
 - since suppliers are legally obliged to incur social and environmental obligation costs, they have an expectation, as a matter of substantive fairness, that they should be able to recover them;
 - the duties set out in the Bill, when read in conjunction with suppliers’ rights in public law, mean that a proper examination of suppliers’ actual costs should be made. Broad estimates are unlikely to be compatible with Ofgem’s duties, in this context particularly; and
 - we remain deeply concerned about the process Ofgem is following.
10. The majority of the legal and process concerns we have raised previously are applicable also to WP4. To the extent that they are not repeated in full here, that should be taken as read.

Response to Ofgem's Working Paper #4

Context

11. Working paper 4 excludes two particular issues: the smart meter rollout and the cost of administering the different schemes that are the subject of the working paper.
12. It is particularly concerning that smart meter costs have not been covered in this working paper, nor have they been covered in any of the other working papers that Ofgem has issued. This is because smart meter costs are material, and there are a number of significant problems with the way that they are treated in the current PPM cap and its subsequent application to the WHD safeguard tariff. We have made Ofgem aware of these concerns in our previous submissions, including to Ofgem's December consultation.²
13. We are particularly concerned that Ofgem has not yet requested the information it will require to undertake a proper evaluation of smart meter costs and benefits. We have set out the information Ofgem will require in Annex 1 to this response. This information will be required in addition to the data Ofgem has already requested as part of the RFIs, as well as the data collected by BEIS. Ofgem will need to collect this information before it can be in a position to reach a view of both the appropriate initial level of net smart costs to be covered in the cap and the associated indexation to be applied to it over time, whatever overall methodology Ofgem uses to set the cap.
14. We also note that Ofgem explicitly excludes consideration of the costs of administering the schemes covered in this working paper. Since these costs will need to form part of the allowable cost base under the price cap, we assume that Ofgem is planning to take them into account as part of a consideration of indirect supplier costs. There are two factors that Ofgem will need to take into account if this is the case:
 - If Ofgem is to use the competitive reference price approach to determine the initial level of the cap, Ofgem will need to make sure that these costs are picked up if the benchmark includes suppliers that are not fully obligated.
 - When Ofgem looks at how it will index the cap over time, it will need to consider how these administration costs will change over time. Since such changes are more likely to be driven by changes to the policies themselves, it may make sense for them to be indexed alongside other policy costs.
15. Given both of these factors, it might be sensible for Ofgem to treat the costs of administering the schemes as part of its consideration of policy costs rather than separately.

² https://www.ofgem.gov.uk/system/files/docs/2018/03/centrica_-_response_to_ofgem_on_providing_protection_to_more_vulnerable_customers_-_redacted_non-confidential.pdf

Domestic suppliers' environmental and social obligations

16. The broad descriptions of each of the policies in Table 2 (and Appendix 2) of WP4 provide a reasonable summary of the costs to suppliers under each scheme, subject to the concerns we raise about the Renewables Obligation and ECO below.
17. Whilst Ofgem has included references to Capacity Markets in the working paper, how Ofgem will reflect this element of cost when setting the default tariff remains unclear (para 3.4). We would urge Ofgem to consult with stakeholders properly on this important issue.
18. The approach that Ofgem should take to capacity market costs is dependent on the approach it takes to indexation of the price cap. In particular, if wholesale costs are indexed in a manner that is analogous to the approach in the current PPM cap then capacity market costs should not be included as part of the wholesale cost element. This is because the approach to indexation would not be appropriate.

Our Current View**Use of benchmarking**

19. We agree that most policy costs are beyond suppliers' control and we support Ofgem's view that the cap must reflect the costs incurred by fully-obligated suppliers. However, the working paper appears to imply that benchmarking could be used for the Renewable Obligation and Energy Company Obligation costs. We do not consider that such an approach would be appropriate for either of these schemes, as explained below.

Renewables Obligation

20. Suppliers can comply with their Renewable Obligation (RO) either through the procurement of Renewable Obligation Certificates (ROCs) from relevant generators or through the payment of the buyout price. Most suppliers will in practice fulfil some of their obligation through the purchase of ROCs and some through the payment of the buy-out price.
21. As WP4 sets out, "the level of the obligation and the buy-out price... are both outside of supplier's control."³ These are the drivers of the costs of the scheme and the flexibility that suppliers have over how they meet their obligation level is negligible. However, Ofgem then calculates the costs to suppliers of complying with the RO through payment of the buy-out price for 100% of their obligations over the period 2014-15 to 2018-19. Ofgem suggests that it expects this approach "to overstate the true cost that suppliers' incur (by an amount similar to the recycle value)." This statement implies that Ofgem

³ WP4, Table 2

believes that suppliers essentially capture all of the recycle value, with the ROC price being equal to the buyout price. However, this will not be true on a forward-looking basis.

22. The RO closed to all new generating capacity on 31 March 2017, confirming that the market will be structurally short of ROCs over future years, greatly reducing the uncertainty over the level of ROCs that will be available in the market.^{4,5} With the ROC market structurally short, the opportunity for suppliers to extract some of the value of the recycle fund in the way that Ofgem has implied in this working paper has effectively been eliminated.
23. This means that, looking forward, the expected net costs of complying with the RO through the purchase of ROCs, or through the payment of the buyout price, will essentially be equivalent. Any variations in the costs of RO compliance will therefore be transitory and attributable only to the timing of purchase decisions and random movements in ROC prices over the compliance period that reflect updated views of the expected value of the buyout fund. Any attempt to benchmark this would merely follow a lower envelope of ROC costs that no supplier could be expected to achieve in a sustainable manner.

Energy Company Obligation

24. Ofgem implies that it may be possible to benchmark an “efficient” level of ECO costs. However, as we stated in our response to WP1, it is not possible to meaningfully benchmark ECO costs in this way. The forthcoming changes as part of ECO3 are likely to be so significant that any historic benchmarking exercise would be meaningless. For example, BEIS is proposing to focus entirely on the “affordable warmth” part of ECO, with a different pool of eligible households from the current scheme. Furthermore, as of 29th April, BEIS had only just closed their consultation, and so there are still significant uncertainties about how the scheme will operate in practice.
25. Even if ECO was not being amended, any attempt to benchmark historic costs at a single point in time would be misleading. As set out in our response to working paper 1, suppliers will have phased their ECO volumes differently. In addition, obligation levels for suppliers are set based on supplier size on snapshot dates. This means that suppliers that are growing over a period will have an obligation that is smaller relative to their average customer numbers than a supplier that is in a steady state or shrinking. This does not represent efficiency in delivering ECO but is an artefact of the policy design. For these reasons, comparing costs at a given point of time would be highly misleading.
26. Given the uncertainties about changes to the scheme, we consider that the only practical way for Ofgem to assess the forward-looking cost of ECO will be to take the total cost from BEIS’s Impact Assessment and use this to derive a cost per MWh for obligated suppliers. However, it is important to recognise that there are issues with the current Impact Assessment. For example, the Impact Assessment does not adequately account for the likely cost increases driven by the restriction of rural and Solid Wall delivery to

⁴ <https://www.ofgem.gov.uk/environmental-programmes/ro/about-ro/ro-closure>

⁵ We note that a limited amount of generation capacity will still be able to commission after this date, and still be eligible for ROCs, but the capacity is much more limited than it has been historically.

the Affordable Warmth Group, or new compliance requirements due to Each Home Counts. Nor does it consider how costs will change over the length of the obligation or adequately assess how proposed changes to the taper mechanism and supplier market shares will impact the costs faced by obligated suppliers. It is hoped that BEIS will address these concerns when it is revised, but if this isn't the case then Ofgem may need to make some adjustments before it uses the estimate to set the cap.

Setting the baseline level of the cap

27. All three sources of information that Ofgem suggests (supplier data, OBR data, and scheme administrative data) should theoretically provide similar results for the costs of other policies and Ofgem should consider cross checking its calculations based on each of the data sources. However, to set the baseline value for the schemes other than ECO, we would expect that Ofgem will need to use either supplier data or scheme administration data given the timelines for the OBR releasing 2017/18 data. Whichever data source Ofgem uses it should ensure that it appropriately captures suppliers' administrative costs of delivering each policy.
28. Under some of the methodologies that Ofgem has set out for determining the cap (in particular options 2 and 3), Ofgem will need to distinguish between two types of calculations to set the baseline cost allowance for ECO:
 - Ofgem will first need to identify and remove the historic ECO costs of suppliers from any benchmark price it uses.
 - It will then need to replace them with the forecast ECO3 costs of a fully-obligated supplier.
29. This working paper (and the associated working paper 5) are both silent on the issue of how Ofgem intends to do this in practice.

How policy costs vary with consumption

30. We agree that it is important to ensure that both the level and indexation of the cap reflects the actual relationship between the level of these costs and consumption.
31. We also agree that Ofgem should adjust the allowance for multi-register customers to cover the different capacity market payments owing to differing load profiles. This should be a simple adjustment to make. As an example, using historic British Gas load profile data, we estimate that just over $\frac{1}{3}$ of a domestic unrestricted customer's energy consumption falls within the winter peak (winter weekdays between 4pm and 7pm). By contrast, just under $\frac{1}{3}$ of domestic E7 energy falls within this period. For the same energy consumption, a supplier will therefore need to pay roughly $\frac{1}{3}$ less in capacity market payments for E7 customers compared to unrestricted customers. Ofgem could carry out a similar analysis using industry-wide load profile data.

Obligation thresholds

32. Allowing for obligated suppliers' costs is necessary to ensure financeability. Therefore, we agree that the level of the cap must be set in a way that reflects the policy costs that would be incurred by a fully obligated supplier in a steady state. However, this does not address the competitive distortions introduced by policy thresholds that Ofgem has itself

recognised in its recent response to a consultation by the National Infrastructure Commissions.⁶ Ofgem should press the government to address this issue.

33. In order to ensure that the level of the cap is set in a way that reflects the policy costs that would be incurred by a fully obligated supplier in a steady state, Ofgem must take account of the market size of exempt suppliers over time.
34. The per customer or per MWh obligation for obligated suppliers increases with the proportion of exempt suppliers. The market share of non-obligated suppliers is currently around 7% which means that 100% of ECO costs need to be recovered from the bills of just 93% of customers. When considering future ECO costs, Ofgem will need to take into account the evolution of the market share of exempt suppliers in order to appropriately determine the future costs of an obligated supplier.
35. The final outcomes of the current WHD and ECO3 consultations are currently unknown. However, potential changes to exemptions may introduce further complications for Ofgem. If the proposed 'supplier allowance' approach to the tapering of the obligation is introduced this will further increase the share of ECO costs borne by large suppliers and break the linear link between supplier size and obligation size. If this were to happen it will create a penalty to scale and Ofgem will need to narrowly specify the assumed size of the benchmark supplier. Whatever the Government decides on thresholds in the short term, Ofgem will need to set the cap based on obligated supplier costs and reflective of the policy design.

Updating the cap using cost forecasts

36. We agree that, in general, the OBR data is likely to provide the best method of ongoing indexation of policy costs, subject to the comments we have raised previously and above regarding ECO. We also consider that an adjustment should be made to convert the forecasts to pounds per MWh to avoid changes in overall consumption leading to an over-recovery or under-recovery of those costs that are charged per unit of energy consumed, and an explicit allowance should be added for AAHEDC.
37. If over time policy costs, or other areas of costs, differ materially from those assumed in the cap to the extent that the cap is materially inaccurate, Ofgem will need to reopen and adjust the tariff cap to account for these changes. Clearly, in the event that the price cap methodology failed to allow suppliers to fully recover all efficiently incurred costs relating to policy obligations, there would be serious implications for suppliers' ability to comply.

Next steps

38. We have responded to the next steps set out by Ofgem as part of our response to working paper 5.

⁶ Page 6

https://www.ofgem.gov.uk/system/files/docs/2018/02/ofgem_national_infrastructure_assessme nt_response_1.pdf

Annex 1: Data Ofgem will need to gather to inform its calculation of smart metering

39. This Annex sets out the additional data that we consider Ofgem will need to collect to be able to estimate the net smart meter costs required to be able to set the cap. This is in addition to the data that:
- Ofgem has already collected through its RFI issued on 28 March 2018 and submitted on 23 April 2018; and
 - suppliers provide as part of their Large Supplier Annual Return to BEIS (“BEIS annual return”).
40. Without additional data, Ofgem will not have the information it will need to ensure that net smart costs can be appropriately included within the control and updated over time. This is unsurprising given that the BEIS information request was designed to aid BEIS in its policy evaluation of the roll-out using a social cost benefit analysis framework.
41. Table 1 below sets out the relevant cost lines that need to be taken into account when considering the net costs to suppliers of the smart meter programme. For each cost line, the related information from the BEIS annual return is set out, alongside a description of the additional information that we believe that Ofgem will need to collect. Table 2 follows the same structure for the benefits.
42. In addition to the information set out in Tables 1 and 2, Ofgem will also need data on average meter numbers operated and installed for each supplier for each year for which costs and benefits are requested. These would need to cover the number of:
- traditional credit electricity meters operated;
 - traditional PP electricity meters operated;
 - traditional credit gas meters operated;
 - traditional PP gas meters operated;
 - smart electricity meters operating in credit mode;
 - smart electricity meters operating in PP mode;
 - smart gas meters operating in credit mode;
 - smart gas meters operating in PP mode;
 - smart electricity meters installed in year that are operating in credit mode;
 - smart electricity meters installed in year that are operating in credit mode;
 - smart gas meters installed in year that are operating in credit mode; and
 - smart gas meters installed in year that are operating in credit mode.
43. Ofgem should be able to gather the majority of this information from Smart DCC and from suppliers. We would expect Ofgem to issue an RFI in draft prior to finalising its request. We recognise that, for a limited number of cost and benefit categories suppliers may find it challenging to determine the split of costs or benefits between smart and non-smart activities. Where this proves to be the case Ofgem may need to consider alternatives, for example based on estimates in the BEIS smart meter Impact

Assessment. Whilst this may be necessary for a limited number of cost or benefit categories, this should not prevent Ofgem from gathering more readily accessible data from suppliers on the other cost and benefit categories to improve its assessment of net smart meter costs.

Table 1. – Limitations of the BEIS annual return as a data source for calculating supplier smart meter costs.

Area of supplier costs	Information available in the BEIS annual return	Issues and additional data requirements
Traditional meter rental termination costs	There is no information in the BEIS annual return on this cost item given BEIS is interested in a social cost benefit analysis	<p>Issue: When acquiring a retail customer, any energy supplier will know that it has a commitment to get that customer on to a smart meter. If that customer currently has a traditional meter that will require a payment to be made to the MAP when it is removed, the energy supplier will only want to acquire it if the price it can charge will on average cover the incremental cost otherwise, on average, acquired customers will be loss-making. Traditional meter rental termination costs must therefore be included in any price cap as, absent this, a situation would be created where there is a disincentive for suppliers to compete for certain customers.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. Average electricity credit meter rental termination cost 2. Average electricity PP meter rental termination cost 3. Average gas credit meter rental termination cost 4. Average gas PP meter rental termination cost
IHD costs	Item 4.14 Cost of an IHD (the unit cost of an IHD)	<p>Issue: The BEIS annual return only collects data on the unit costs of IHDs. However, in order to determine the cost to suppliers of installing IHDs, Ofgem will need to know how many have been installed as it is not necessarily the same as the number of smart meters.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. The average number of IHDs installed per smart meter installed



Area of supplier costs	Information available in the BEIS annual return	Issues and additional data requirements
Smart Energy GB costs	There is no information in the BEIS annual return on this cost item	<p>Issue: Suppliers contribute to the costs of industry wide advertising to promote smart meters by Smart Energy GB. These costs need to be captured in an assessment of suppliers' costs.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> Suppliers' share of Smart Energy GB costs
Supplier marketing costs	There is no information in the BEIS annual return on this cost item	<p>Issue: The smart meter policy framework is one in which customers have to actively "opt in" to agree to take a smart meter. Customer engagement is therefore a crucial part of the process to get a customer to agree to take a smart meter and then to ensure that they can maximise the benefits from its use. These costs include direct advertising and marketing spend as well as the costs of outbound call centres, inbound call centres, letters and direct mails, text messages, email, digital and face-to-face channels.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> The average marketing costs incurred by suppliers per smart meter installed.



Area of supplier costs	Information available in the BEIS annual return	Issues and additional data requirements
<p>Increase in inbound enquires and customer service overheads</p>	<p>There is no information in the BEIS annual return on this cost item</p>	<p>Issue: Immediately following the installation of a smart meter there is typically a spike in inbound call contacts from customers. The additional costs of these need to be captured as a cost to suppliers of the smart meter roll out programme.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. The average cost of increased inbound calls in the months immediately following the installation of a smart electricity meter replacing a PP electricity meter 2. The average cost of increased inbound calls in the months immediately following the installation of a smart electricity meter replacing a credit electricity meter 3. The average cost of increased inbound calls in the months immediately following the installation of a smart gas meter replacing a PP gas meter 4. The average cost of increased inbound calls in the months immediately following the installation of a smart gas meter replacing a credit gas meter



Area of supplier costs	Information available in the BEIS annual return	Issues and additional data requirements
<p>Meter rental costs</p>	<p>There is information in the BEIS annual return that is related to meter rental charges, but the charges themselves are not directly reported.</p> <p>Item 4.12a costs of a smart meter (the unit price of the gas and electricity smart meter asset) – SMETS1</p> <p>Item 4.12b costs of a smart meter (the unit price of the gas and electricity smart meter asset) – SMETS2</p> <p>Item 4.13a Cost of an installation visit (the average cost of an installation visit) – Single and Dual</p> <p>Item 4.15 Cost of a communications hub</p>	<p>Issue: The BEIS annual return collects information on the upfront costs of a number of smart meter items that are charged to suppliers as part of their meter rentals. However, the BEIS annual return does not collect information on smart meter or traditional meter rental costs.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. Average smart electricity meter rental 2. Average smart gas meter rental 3. Average traditional electricity credit meter rental 4. Average traditional gas credit meter rental 5. Average traditional electricity PP meter rental 6. Average traditional gas PP meter rental



Area of supplier costs	Information available in the BEIS annual return	Issues and additional data requirements
Operations and maintenance costs for metering equipment	There is no information in the BEIS annual return on this cost item	<p>Issue: Smart meters will incur different O&M costs from traditional meters.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. O&M costs per year per smart electricity meter 2. O&M costs per year per smart gas meter 3. O&M costs per year per traditional PP electricity meter 4. O&M costs per year per traditional credit electricity meter 5. O&M costs per year per traditional PP gas meter 6. O&M costs per year per traditional credit gas meter
Supplier IT costs	There is no information in the BEIS annual return on this cost item	<p>Issue: In order to deliver the smart meter roll out programme and deliver many of the potential benefits of smart meters, energy suppliers need invest in IT systems.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. The annual additional IT costs of suppliers required to deliver the smart meter programme. <p>Note: This is an area where suppliers may face particular difficulty in identifying smart specific costs. If suppliers cannot reasonably split this out then Ofgem may have to rely on data from the IA</p>
Legal and organisational costs	There is no information in the BEIS annual return on this cost item	<p>Issue: The smart meter roll out programme is a significant delivery task for suppliers requiring suppliers to incur material organisational costs to deliver the programme.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. Suppliers annual legal and organisational costs of delivering the smart roll out programme. <p>Note: This will include the costs of infrastructure and journey development as well as regulatory and strategic support to the smart meter programme within the supplier.</p>



Area of supplier costs	Information available in the BEIS annual return	Issues and additional data requirements
DCC Costs	There is no information in the BEIS annual return on this cost item	<p>Issue: Suppliers are required to pay a number of regulatory charges to the DCC. These charges need to be captured in any assessment of supplier smart meter costs and the BEIS annual return does not cover these costs.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. Smart DCC fixed gas supplier charge (per mandated smart metering system) 2. Smart DCC fixed electricity import supplier charge (per mandated smart metering system) 3. Smart DCC Alt HAN gas supplier charge (per mandated smart metering system) 4. Smart DCC Alt HAN electricity import supplier charge (per mandated smart metering system) 5. Smart DCC fixed CH charge per enrolled smart gas meter 6. Smart DCC fixed CH charge per enrolled smart electricity meter 7. Smart DCC explicit charges <p>Note: Ofgem should be able to gather the majority of this information directly from Smart DCC rather than from suppliers.</p>
SMETS1 communication charges	There is no information in the BEIS annual return on this cost item	<p>Issue: For enrolled meters the communication services will be provided by the DCC through their regulated charges. However, before SMETS1 meters are enrolled with the DCC communication, services are provided by other service providers and charged for separately.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. Non-DCC smart communication charges per smart gas meter 2. Non-DCC smart communication charges per smart electricity meter



Area of supplier costs	Information available in the BEIS annual return	Issues and additional data requirements
Pavement reading inefficiency for traditional credit meters	Item 4.01 Average cost of cyclic meter reading activity per customer	<p>Issue: As the smart meter roll out progresses the density of remaining traditional credit meters will reduce and therefore the cost of obtaining a read from these increases. The BEIS annual return reports cyclic meter reading costs per customer rather than per customer account and so this figure is a blend of single fuel and dual fuel meter reading costs.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. Average cost of cyclic meter reading for traditional credit electricity meters per year per meter 2. Average cost of cyclic meter reading for traditional credit gas meters per year per meter 3. The historic average cost of meter reading for traditional credit electricity meters per year per meter. 4. The historic average cost of meter reading for traditional credit gas meters per year per meter.

Table 2. – Limitations of the BEIS annual return as a data source for calculating supplier smart meter benefits.

Area of supplier benefits	Information available in the BEIS annual return	Issues and additional data requirements
Reduction in inbound enquiries and customer service overheads	Item 4.06 Average cost of inbound contact handling per customer per annum (billing enquiries, billing disputes, billing complaints only)	<p>Issue: In the longer term smart meters are expected to reduce the volume of inbound contacts from customers.</p> <p>However, the BEIS annual return only captures the cost of inbound contact handling per customer for certain categories of contact. As these costs will not be eliminated by the introduction of smart meters it does not allow for changes in the cost of inbound call handling to be assessed.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. Average cost of inbound contact handling per traditional credit electricity meter customer 2. Average cost of inbound contact handling per traditional PP electricity meter customer 3. Average cost of inbound contact handling per traditional credit gas meter customer 4. Average cost of inbound contact handling per traditional PP gas meter customer 5. Average cost of inbound contact handling per smart electricity meter customer operated in credit mode 6. Average cost of inbound contact handling per smart electricity meter customer operated in PP mode 7. Average cost of inbound contact handling per smart gas meter customer operated in credit mode 8. Average cost of inbound contact handling per smart gas meter customer operated in PP mode
Debt management	<p>Item 4.07 Average cost per customer incurred in recovering debt.</p> <p>Item 4.08 Average cost of debt write off per customer</p>	<p>Issue: Smart meters should reduce debt management costs by providing accurate and timely information to customers and allowing them to more easily be switched to prepayment plans. However, smart meters will not eliminate these costs and the BEIS annual return only collects estimates of debt management costs for traditional meter customers. Further, these are not split by fuel type.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. Average debt management costs for smart credit electricity customers 2. Average debt management costs for smart credit gas customers 3. Average debt management costs for traditional credit meter electricity customers 4. Average debt management costs for traditional credit meter gas customers.



<p>Net impact of avoided site visits</p>	<p>Item 4.01 Average cost of cyclic meter reading activity per customer</p> <p>Item 4.02a Average cost of a non-cyclic meter read</p> <p>Item 4.03 Average cost of a site visit to change or adjust a meter for the purposes of a tariff change (excluding by payment mode such as PPM).</p>	<p>Issue: Smart meters mean that a number of site visits can be avoided and lead to a cost saving for suppliers.</p> <p>The BEIS annual return provides data on cyclic meter reading activity per customer rather than per customer account. Therefore, this is a blended average of the cost of meter reading for dual fuel and single fuel customers. Whilst the BEIS annual return has data on the average costs of non-cyclic meter reads and site visits to change or adjust meters, it does not have volume measures for these so it is not possible to calculate the annual costs of these visits.</p> <p>Additionally, whilst smart meters will remove the need to visit consumers' properties to read meters, suppliers will instead need to visit meters to perform dedicated safety inspections, which are currently conducted as part of the regular meter reading process. This represents a new cost that needs to be netted off against the savings from avoiding other site visits.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. Average cost of cyclic meter reading for traditional credit electricity meters per year per meter 2. Average cost of cyclic meter reading for traditional credit gas meters per year per meter 3. Average cost of non-cyclic meter reading for traditional credit electricity meters per year per meter 4. Average cost of non-cyclic meter reading for traditional credit gas meters per year per meter 5. Average cost of site visits to change or adjust a credit electricity meter for the purposes of a tariff change per year per meter 6. Average cost of site visits to change or adjust a PP electricity meter for the purposes of a tariff change per year per meter 7. Average cost of cyclic meter reading for traditional PP electricity meters per year per meter 8. Average cost of cyclic meter reading for traditional PP gas meters per year per meter 9. Average cost of non-cyclic meter reading for traditional PP electricity meters per year per meter 10. Average cost of non-cyclic meter reading for traditional PP gas meters per year per meter 11. Average cost of a safety visit per smart meter per year <p>Note: Items 1 and 2 on this list are the same as items 1 and 2 required for the pavement reading inefficiency for traditional credit meters cost line.</p>
<p>Reduced cost of switching</p>	<p>Item 4.04 Average cost of obtaining an actual change of supplier meter</p>	<p>Issue: Smart meters should reduce the cost of switching customers because they will be able to provide accurate meter readings to be used for the exchange point. This should mean there is no additional cost to obtaining a change of supplier meter reading and transfer exceptions should be largely avoided. The BEIS annual return collects the unit costs relevant for estimating this value but does not collect volumes.</p>



	<p>reading per service transferred</p> <p>Item 4.05 Average cost of clearing exceptions per service transferred</p>	<p>Additional data required:</p> <ol style="list-style-type: none"> 1. Average number of electricity services transferred per electricity account per year 2. Average number of gas services transferred per gas account per year
<p>Reduction in prepayment cost to serve</p>	<p>Item 4.09a Average cost to serve per PP meter (traditional) – Gas</p> <p>Item 4.09a Average cost to serve per PP meter (traditional) – Elec</p> <p>Item 4.09b Average cost to serve per smart meter operated in prepayment mode – Gas</p> <p>Item 4.09b Average cost to serve per smart meter operated in prepayment mode – Elec</p>	<p>Issue: Smart meters can be remotely configured to operate in either credit or prepayment mode using the same infrastructure. This means that the cost to serve for PP meter customers can be reduced on both an ongoing basis and by avoiding the need for meter replacements. The BEIS annual return collects most of the data necessary to calculate the value of these reductions in costs. However, it does not collect volume data on the number of PP meter exchanges or differentiate between the cost of a gas and electricity meter exchange.</p> <p>Additional data requirements:</p> <ol style="list-style-type: none"> 1. Average cost of an electricity PP meter exchange 2. Average cost of a gas PP meter exchange 3. Number of electricity PP meter exchanges per year 4. Number of gas PP meter exchanges per year



	Item 4.10 Average cost of a PP meter exchange	
Remote dis-connection.	Item 4.11 Average cost of a de-energisation or reenergisation visit.	<p>Issue: Smart meters will have remote disconnection capabilities and therefore the costs of de-energisation or re-energisation visits can be avoided. However, the BEIS annual return does not collect data on the frequency of such visits.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. Average number of de-energisation or re-energisation visits per traditional electricity account per year.
Reduction in theft	There is no information in the BEIS annual return on this cost item	<p>Issue: Smart meters are expected to lead to reductions in theft of gas and electricity because of more accurate monitoring of energy flows. However, the BEIS annual return does not collect data on the frequency of such visits.</p> <p>Additional data required:</p> <ol style="list-style-type: none"> 1. Average value of the reduction in electricity theft per smart electricity meter operated 2. Average value of the reduction in gas theft per smart gas meter operated <p>Note: It is likely that suppliers will not have sufficient information on the relative levels of theft over time to be able to estimate these impacts. Ofgem may need to rely on the Impact Assessment for estimates of theft reduction benefits but should consider what evidence supports these benefits levels and whether they are already captured in other parts of Ofgem’s assessment of suppliers costs.</p>

Annex 2: Legal Considerations

44. This Annex deals with legal points arising specifically in relation to WP4. It builds on the points made in the legal annex to Centrica's response to WP3 and WP5 and should be read in conjunction with the other submissions Centrica has made to Ofgem. We would particularly refer you to the discussion in our response to WP5 about Ofgem's likely statutory duties.
45. Many of the same issues that arise in relation to this working paper are relevant elsewhere and we elaborate on those points below. However, the treatment of environmental and social obligation costs presents particular challenges. The absence of an analysis of smart meter costs is particularly concerning.
46. We describe some of these challenges below. Please note that the fact that we highlight some particular issues in this context does not mean that they are not important in other contexts.
47. First, since suppliers are obliged to incur the costs of social and environmental obligations, it is right that they should be able to recover them. To put this another way: alongside the obligation to incur these costs is an expectation that they can be recovered.
48. Secondly, there is a clear public interest in these obligations being imposed. Suppliers should be encouraged to treat these obligations seriously. They should be incentivised to comply enthusiastically and strenuously. This is a reason why Ofgem should take extra care to ensure that no supplier under-recovers in relation to these costs.
49. In legal terms, this category of cost engages certain specific protections:
 - First, this area falls within the first McInnes category. Ofgem's proposals risk under-recovery of actual costs which, in relation to the cost of social and economic obligations, would deprive suppliers of the money they spend on carrying out these obligations but could not recover. This would be an effective forfeiture. For this reason, suppliers are entitled to the enhanced procedural protection which is engaged in forfeiture cases.
 - Secondly, Article 1 of Protocol 1 of the ECHR is engaged for the same reason.
 - Thirdly, it would breach the European and domestic principle of consistency for the Government/Ofgem to impose these obligations and then to find that their costs should not be fully recoverable.
 - Fourthly, it would be a plain and conspicuous unfairness (in a substantive sense) if the Government/Ofgem imposed these obligations and then did not allow suppliers to recover their costs.
50. Ofgem needs to look at these points in the context of the likely statutory duties which are currently before Parliament in the Bill. It is very hard to see how a pure top-down approach – which did not make specific, quantified allowance for smart meter costs – could possibly meet the requirements of the Bill. For example, the need to ensure that holders of supply licences who operate efficiently are able to finance activities authorised by the licence will require that Ofgem make properly-informed assessments as to costs

which are not directly within suppliers' control. Because if it is a requirement that suppliers must be able to finance activities authorised by regulation then it must also be a requirement that they can recover activities required by regulation, whether that is through the licence or through other instruments.

51. Certain important points flow from this:
 - Broad benchmarking and other proxies are unlikely to be sufficient here. In this context, perhaps more than any other, Ofgem needs to ensure that suppliers recover at least their actual costs.
 - ECO will need to be considered on a forward-looking basis
 - Small supplier exemptions must not be included in any benchmark, not even on a weighted basis.
52. The exclusion of Smart Meter costs from this consultation gives rise to some significant legal issues. Many of the points we have made in relation to other policy costs are also relevant to smart meters. However, as detailed in Annex 1 of this response, Ofgem will need to gather further information and then consult on proper treatment of those costs, in order to comply with the duty to undertake sufficient inquiry.
53. The Bill places great importance on the roll-out of smart meters. It is identified in clause 7(2) as a key factor in whether the tariff cap should continue (or not) after its initial period. Since the whole thrust of the Bill is that this cap should be a temporary intervention, it is incumbent on Ofgem to design the cap in a manner which reflects that. This means that the cap must not hinder – and, ideally, should *help* – the roll-out of smart meters. The failure to look at this separately is therefore worrying; and a failure to allocate sufficient amounts in the cap for smart meters would be a serious mis-step in approach.
54. A proper evaluation of smart meter costs and benefits is therefore central to Ofgem's task in setting the present price control. In the event that insufficient allowance is made for net smart costs in the retail price cap, the result will be either that suppliers' financeability is endangered (contrary to clause 1(6)(d) of the draft Bill) or that the rollout of smart meters is delayed and the number of smart meter installs will fall.
55. In the latter regard we note that the UK is subject to relevant and binding obligations under EU law. As part of the Third Package of Energy Liberalisation Measures adopted on 13 July 2009, EU Member States are obliged to "*ensure the implementation of intelligent metering systems that shall assist the active participation of consumers in the gas and electricity markets*" - in other words, to roll out some form of smart metering subject to the results of an economic assessment. For electricity, where the roll-out of smart meters is assessed positively, there is a specific obligation in paragraph 2 of Annex I to Directive 2009/72/EC on Member States to ensure that at least 80% of consumers are equipped with intelligent metering systems by 2020.
56. These points are particularly important given that any cap will in any case make consumers less likely to want a smart meter installed (because they may not feel a need for the extra information they get from a smart meter while they are protected by the cap).
57. Thus if the cap hinders the roll-out of smart meters it will:
 - Run contrary to the intention of the Bill that the cap should be a temporary measure;

- Risk breaching EU law.
58. Ofgem must, therefore, address smart meters fully and, once it has done so, ensure that the cap includes an adequate and explicit allowance for them.

Process issues

59. As for the other working papers, the time allowed for responses to WP4 was extremely short and the response period overlapped with that for WP3 and WP5. The issues covered by WP4 are of importance and we have not been able to do them justice in the time available.
60. We are concerned to note that, although the working paper covers a range of issues relating to the treatment of environmental and social obligation costs under the tariff cap, there are a number of substantive issues that are not considered in the paper and which Ofgem have failed to consult stakeholders on ahead of the policy paper in May.
61. The working paper highlights a number of additional procedural deficiencies, and in particular:
- We note that Ofgem itself admits that it does not have access to all necessary information (it is still awaiting information from suppliers (see paragraph 3.8 of the Working Paper)).
 - Whilst Ofgem has included references to Capacity Markets in the working paper, how Ofgem will reflect this element of cost when setting the default tariff remains unclear (para 3.4). Ofgem remains unable to set out its approach in a meaningful and substantive way. Centrica would urge Ofgem to consult with stakeholders properly on this important issue.
 - With regards to obligation thresholds, Ofgem highlights that it expects to set the level of cap in a way that reflects the policy costs that would be incurred by a fully-obligated supplier in steady state. However, in relation to the participation thresholds used for the ECO and WHD schemes, Ofgem refers to the current consultations and therefore does not consider these points any further. Irrespective of the outcome of the current consultations Ofgem needs to ensure that any cap includes obligated supplier costs and any benchmarks which don't fully capture these are suitably adjusted. However, it is also clear that there are inter-dependencies between the consultations and working papers, and it is concerning that Ofgem has side-lined these considerations and not considered them further.
 - We are deeply concerned about the apparent side-lining of the bottom-up approach (paragraph 4.9-4.10);
 - Having decided to consult, Ofgem must ensure that the consultations are proper ones, in conformity with the requirements of fairness as developed in the case-law.⁷ As

⁷ See *R. (EasyJet Airline Co Ltd) v Civil Aviation Authority* [2008] EWCA Civ 755.

mentioned in our previous submission, Ofgem must consult when its proposals are still at a formative stage; must include sufficient reasons for its proposals to allow those consulted to give intelligent consideration and an intelligent response; adequate time must be given for this purpose; and Ofgem must take conscientious account of the responses received from stakeholders.⁸

- The deficiencies in process, to date, fly in the face of regulatory best practice and, unless corrected, leave its approach open to challenge in the future.

Timing issues

62. As detailed in our response to WP3, we remain concerned about the implications of Ofgem's comments about timescales. The content of WP4 has not allayed Centrica's concerns that the need for the cap to be introduced "as soon as practicable" should not, and does not, give Ofgem scope to cut corners; Ofgem continues to be required to devote sufficient resources to ensuring it undertakes a meaningful and rigorous consultation and decision-making process. The *process and substantive decision* Ofgem must reach on the design of the cap must not be any less rigorous or informed than they would otherwise need to be in any other context.

Ofgem's duty to undertake sufficient enquiry

63. At paragraph 3.8 of the working paper, Ofgem explains that it has requested information from suppliers of how they forecast the costs of the schemes mentioned in the working paper. Ofgem explains that it will draw on it as they continue to develop their views on this area. However, Ofgem in its haste to set the cap, has published the working paper before it has had the opportunity to consider the evidence provided by suppliers. Procedurally, as discussed in Centrica's response to WP3, Ofgem has a number of duties relating to its process. There are serious risks with Ofgem proceeding with its policy consultation (and indeed publishing these working papers) without being privy to the relevant information included.
64. As Ofgem will be aware, the public law requirements for consultation require that stakeholders are given adequate information about Ofgem's proposals, the evidence base to support the proposals, and its underlying reasoning, to respond in an intelligent and informed way. We are concerned that WP3 illustrates that a substantial amount of further work is required of Ofgem before a legally sound consultation can take place.
65. Noting the reference in Centrica's response to WP3 to the Tameside Duty⁹ - i.e. that a failure by Ofgem to acquaint itself with the relevant information so as to enable itself to answer the question would leave itself open to a claim for breach of this common law duty - we continue to be concerned that Ofgem's process is contrary to its administrative law objectives and vulnerable to challenge.
66. Finally, ✕ we remain concerned that Ofgem is moving quickly at the expense of procedural fairness. Without prejudice to everything else we have said, we would note

⁸ See *R. v. North and East Devon H.A., ex p. Coughlan* [2001] QB 213 (CA), per Lord Woolf MR, giving judgment for the Court, at [108].

⁹ *Secretary of State for Education and Science v Tameside Metropolitan Borough Council* [1977] AC 1014, paragraph 1065B

this: if Ofgem is determined to proceed so quickly, it must also be prepared to take criticism on board quickly. Ofgem cannot say “we are too busy to listen to criticism about our action being precipitate”. This would be perverse.