SCOTTISHPOWER

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Dear Jemma,

PROVIDING FINANCIAL PROTECTION TO MORE VULNERABLE CONSUMERS

Thank you for the opportunity to respond to this consultation on extending the WHD price cap to a wider set of vulnerable customers. Whilst we believe that consumers' interests are best protected by promoting effective competition, we note Ofgem's wish to provide safeguard protection for additional vulnerable customers who may face difficulties engaging with the market. It is important that this is done in a way that minimises any adverse impacts on development of competition and engagement in the wider market.

Ofgem's initial extension of the CMA's price cap to Warm Home Discount (WHD) customers was done under very tight timescales in order to come into effect during Winter 17/18, and we recognised that this placed significant constraints on policy design. When Ofgem previously described its plans for 'Phase 1' and 'Phase 2' vulnerable price caps, it was implied that 'Phase 2' would provide an opportunity for a more thorough review of the design of the price cap (including the methodology for setting the level).

We are therefore concerned that Ofgem has already ruled out three of the five options it identified for setting the level of the cap, on the basis that there is insufficient time to implement them. If the 'Phase 2' cap is to be superseded fairly rapidly by the Government's market-wide cap (as seems to be the Government's intention), this raises further concerns that Ofgem may find itself similarly time-constrained in developing the methodology for the market-wide cap. With each new price cap covering a greater percentage of the market, it becomes increasingly important that the methodology adopted by Ofgem is robust and well-considered. We see it as of utmost importance that the cap is set on a sound methodology, properly applied, whether through Ofgem's work or, if necessary, following independent review of Ofgem's decision.

We have the following comments on the approach to the price cap:

- We agree that Department for Work and Pensions (DWP) data matching is the best way to identify eligible customers, and we see no reason why this should not be used by small suppliers as well as large (perhaps with some short implementation leeway). We think the 'proxy' measures suggested by Ofgem have significant drawbacks (poorly targeted, uneven impact and risk of perverse incentives) and we do not consider that they are worth considering further.

- We agree that all suppliers should be required to provide safeguard tariff protections (subject to any requirement for a short delay in implementation for

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small suppliers); if some suppliers are completely exempt, this would lead to confusion in the market and would be distortive of competition.

- We agree that the cap should apply to all meter types (other than prepayment meters, which should be covered by the existing PPM cap) and should apply to all default tariffs and evergreen tariffs (excluding specialist evergreen tariffs where there is clear evidence of continuing customer engagement).

- Both of Ofgem's preferred price cap methodologies have significant drawbacks and we think Ofgem needs to undertake further analysis before an informed decision can be made; the CMA methodology is based on very out-of-date information[1] and Ofgem would need to re-do much of the CMA's analysis to get a robust result – more than it appears to be planning to do; the 'basket of tariffs' approach may require less Ofgem intervention in the long run (since if it works as intended it should track the market) but it is a novel and untested approach. It is unclear whether it could be designed so as to mitigate the risks of unpredictability, susceptibility to gaming and distortion through uneconomic offers being used to boost market share.

- We can see an argument on efficiency grounds for separate direct debit (DD) and standard credit (SC) price caps (reflecting the increased working capital costs of SC) and on fairness grounds for socialising the costs of the bad debt which result from a subset of un-creditworthy customers; on balance we think separate caps for DD and SC would be preferable to a single blended cap.

- The 'competitive headroom' allowance represents a trade-off between promoting competition (for the benefit of all consumers) and reducing maximum prices for vulnerable consumers. Given that there is currently more scope for competition with credit meters than prepayment (because of technical limitations) the impact on competition should attract more weight in the case of credit meters; accordingly, the optimum headroom for credit meters is likely to be higher.

- In terms of refining the CMA methodology, we have identified two key areas for Ofgem to focus its attention: the costs of smart meter rollout and the additional costs faced by large suppliers as a result of their customer mix; we have also suggested two less significant (but relatively straightforward) amendments to address the impact of Government obligations being recovered over a smaller share of the market; and correcting an issue with the CMA indexation methodology.

Should you have any questions in relation to this response, please do not hesitate to contact me.

Yours sincerely,

Rupert Steele
Director of Regulation

[1] When the cap is due to be introduced the Ovo/First Utility benchmark data will be more than 3 years old.

Annex 1

PROVIDING FINANCIAL PROTECTION TO MORE VULNERABLE CONSUMERS – SCOTTISHPOWER RESPONSE

Chapter 2 – Scope

Question 1 – What are your views on our preferred approach of identifying consumers for safeguard tariff protection by primarily relying on data-matching?

Suitability of data matching

We agree that data matching is likely to be the most effective way of identifying consumers for safeguard tariff protection because:

- It is an objective measure with no discretion on the part of the supplier; this avoids perverse incentives associated with other approaches (eg to minimise the number of customers identified as vulnerable) and should lead to a level competitive playing field and minimise any unintended consequences.

- It is less likely to have an uneven impact among similar suppliers due to differences in historic policies, for example on inclusion in the priority services register. (Uneven impacts on different types of supplier, which may have differing proportions of vulnerable customers, remain a problem.)

- Because of its link to benefits payments (with penalties for false declarations and an appeal route if a consumer disagrees with an assessment) it is likely to be a more robust measure of a consumer's financial (or other) vulnerability than other evidence available to suppliers.

- Compared to relying on the Priority Services Register (PSR), data matching is likely to be more effective at identifying long term disengaged customers, since customers who do not shop around may also not register for the PSR, whereas they are more likely to have registered for benefits.

As Ofgem notes, there is already a robust data matching process in place with the Department for Work and Pensions (DWP) in relation to the Core Group of the Warm Home Discount Scheme (WHD) for those suppliers who are either obligated to offer this or do so on a voluntary basis. We understand that Ofgem is at an advanced stage of discussions with DWP regarding extending the data matching process to a wider group of consumers, subject to necessary legislative changes.

We are aware that a number of smaller suppliers have expressed the view that it would not be unduly difficult for them to establish the necessary systems and processes for data matching. Therefore, rather than specifying the 'backstop' option for smaller suppliers, it would appear more appropriate to require such suppliers to use data matching, but allow an additional period of time if necessary (up to 3 months, say), for them to make the necessary arrangements with DWP.

In summary, subject to the necessary amendments to the Digital Economy Act (DEA) to support this wider data matching (see below), we think it may be a reasonably straightforward process to extend data matching to a wider group of customers (and to other

suppliers, subject to time constraints). We therefore believe this would be the most efficient and effective of Ofgem's two proposed options for identifying consumers most in need of this protection.

Legislative changes

Ofgem envisages a bespoke data-matching process between the DWP and suppliers to allow suppliers to identify consumers who receive an income or disability related benefit. We assume this would be done under s36 of The DEA which enables the disclosure of limited personal information to gas and electricity suppliers, where the disclosure is in order to assist those in fuel poverty (eg by reducing their energy costs) and with the intention that it will be used by suppliers in connection with one of the fuel poverty measures listed in s36(3). The list in s36(3) can be modified by the appropriate national authority through secondary legislation, and Ofgem says it intends to work with the Government to include safeguard tariffs as a listed fuel poverty measure.

We would note in this context that measures must be for the purpose of assisting people living in fuel poverty, who are in turn defined as "member[s] of a household living on a lower income in a home which cannot be kept warm at a reasonable cost". This suggests that assistance must be targeted at poorly insulated homes. It is unclear to us whether Ofgem's proposed extension to the safeguard tariff cap would meet these requirements, given that it will be targeted only at those on lower incomes, without reference to the standard of insulation. We would welcome confirmation on these issues, as it may have a bearing on the lawfulness of our processing of the data.

We would also note that the list of functions for which information can be disclosed by gas and electricity suppliers under s37 of DEA is much narrower than under the legislation currently used for data matching (Disclosure of State Pension Credit Information (Warm Home Discount) Regulations 2011) – a problem exacerbated by the narrow definition of beneficiaries in terms of energy performance of their homes, which might have the impractical result of making disclosure unlawful if it is discovered that the home is well insulated. For example:

- it is unclear whether provision of advice is allowed;
- the gateway to allow information disclosure for the purpose of managing the account is no longer available; and
- there seems to be no explicit provision for the disclosure of data for the purposes of testing the relevant systems.

Question 2 – What are your views on our backstop option that requires suppliers to use the information they hold (such as Priority Services Register and debt information) to identify vulnerable consumers?

We understand that Ofgem is looking at possible back-stop alternatives for identifying eligible consumers in order to reduce delivery risk on Ofgem's aim to ensure a wider group of vulnerable consumers receive the proposed financial protections for winter 2018/19,. A contingency could be helpful if it were not practicable for smaller suppliers to use the data matching approach, as we agree with Ofgem that all suppliers should be required to provide safeguard tariff protections to vulnerable consumers (see response to Question 4).

However, as noted in response to Question 1, it appears that a number of small suppliers are confident that it would be practicable to do data matching, subject to DWP resourcing

and possibly some additional leeway in timescales. Given that data matching offers the most efficient and effective route of targeting protection at those in need, and given the risk of unintended consequences associated with the back-stop options, we do not believe Ofgem should be considering them further. .

Targeting of back-stop options

As Ofgem and the CMA have recognised, a balance needs to be struck between promoting competition (as the best way of protecting consumers' interests) and protecting those who are currently unable to engage with the market. The consultation is unclear as to how Ofgem believes this balance can best be struck, but we would suggest that the two most important criteria for identifying those to receive protection are:

- inability to engage in the market (eg for reasons of disability, educational attainment, internet access, etc);

- low income, meaning that the additional cost of default tariffs may have a greater impact than for the rest of the population. Ideally, this would also be linked with property condition as the impact of higher tariffs may be small in a well insulated home. However, we recognise the practical difficulties in achieving this.

Whilst 'indebtedness' is likely to be reasonably well correlated with low income (but not as well as entitlement to benefits)[2], we think that the PSR is likely to be a very poor proxy for the above criteria since:

- some of the largest criteria for inclusion in the PSR (eg families with young children) are not well correlated with income or ability to engage, and will therefore lead to a high 'false positive' rate;

- for customers to be included in the PSR they need to engage with their supplier and provide the necessary personal information; those who are most disengaged may not therefore be on the PSR, leading to a high 'false negative' rate.

We note Ofgem's comment in paragraph 2.23 of the consultation that the two proposed methods for identifying eligible customers may not be mutually exclusive and that suppliers using a data matching approach may also be asked to expand the group of eligible customers using the proposed back-stop option. For the reasons set out above, the set of additional customers whose prices would be capped in this way (ie those not in receipt of benefits but indebted or on the PSR) would exhibit an even worse overlap with the two key criteria (inability to engage and low income) than the back-stop option on its own.

Of course some of the additional customers brought within scope will meet the objectives of the safeguard tariff, but there will also be many who are on higher incomes and are able to engage, and who do not meet the criteria. Ofgem should not lose sight of the need to strike a balance between competition and tariff protection, and we think it very unlikely that the additional set of customers brought within scope would satisfy this balance. We would also have concerns about the practicability of requiring suppliers to implement two new methodologies (expanded data matching and back-stop methodologies) in parallel and on a short timescale.

[2] A proportion of customers who are in debt will be in debt because they have chosen not to pay their supplier rather than because of financial difficulty.

Unintended consequences of PSR/indebtedness

Use of indebtedness and PSR may also have unintended adverse consequences which would not arise for data matching. For example:

- Use of the PSR could create a perverse incentive on suppliers to minimise the number of customers placed on the PSR.

- Use of indebtedness could create a perverse incentive for some customers not to pay their bills and get into debt, in order to benefit from the safeguard tariff.[3]

- There may be a perverse incentive for suppliers to implement stronger approaches to debt management, eg reducing timescales to pay back debt and/or being less minded to accept lower debt repayment rates from customers.

We recognise that suppliers also have licence obligations in relation to supporting vulnerable customers including those in debt[4], but given the large number of suppliers now active in the market and the limited resources available to Ofgem for market monitoring, we believe it would be undesirable to weaken the incentives on suppliers in this way.

It is also worth noting that there may be considerable variation between suppliers in the percentage of customers on the PSR, depending on historic policies. A cap based on PSR membership is likely to have an uneven impact on otherwise similar suppliers, with the risk of distorting competition

Question 3 – Are there other methods for identifying vulnerable consumers that we should consider, either alongside or as an alternative to, our preferred approach?

We have not identified any alternative approaches to identifying vulnerable consumers for the purposes of this protection other than those considered by Ofgem in the consultation document. It may be possible to look at a subset of the PSR (by reason for inclusion on that register), but it seems unlikely to resolve many of the issues about the PSR mentioned in response to Question 2 above.

Question 4 – What are your views on our proposal for all suppliers to be required to provide safeguard tariff protections to vulnerable consumers? What impact would this have on suppliers? Please provide evidence to support your views.

We agree that all suppliers should be required to provide safeguard tariff protections to vulnerable consumers. If some smaller suppliers are not covered by the requirement this could:

- unnecessarily disadvantage those consumers who are currently with such suppliers and who would otherwise have benefitted from the cap;

[3] It has been argued that if a customer is sufficiently clued up to get into debt in order to benefit from a safeguard tariff, they should also be sufficiently engaged to switch to a cheaper fixed term tariff. We do not believe this would necessarily be the case. Deciding not to pay a bill requires far less time and mental effort than researching available tariffs and switching supplier; it also provides an immediate cash-flow benefit, whereas switching supplier may do the opposite.

[4] In particular the obligations to identify vulnerable customers under SLC 0 Standards of Conduct, the obligations under SLC 26 for the promotion of the PSR and identification of eligible customers and the obligations in relation to a customer's ability to pay under SLC 27.

- reduce confidence in switching, if there is a perception that by switching supplier you may lose the protection of the safeguard tariff;

- distort competition by giving such smaller suppliers an unfair competitive advantage.

All suppliers covered by the cap will face some administrative costs in creating a new tariff, identifying eligible customers and moving them to the tariff. However we do not believe that the administrative costs of complying with the cap will be excessive, even for very small suppliers.

Question 5 – What are your views on our proposal regarding the tariff types and meter types our extended safeguard tariff protections would apply to?

Meter types

We agree with Ofgem's proposal that customers should be protected by a safeguard cap regardless of their meter type.

We assume that customers who are already covered by the CMA's prepayment price cap would remain covered by that cap and would not be affected by Ofgem's proposed cap. As with the 'Phase 1' WHD safeguard tariff, we assume that customers on SMETS2 prepayment meters (and any other prepayment meters exempt from the CMA cap) would be subject to Ofgem's safeguard cap (if they satisfy the eligibility criteria).

Tariff types

We agree with Ofgem's proposal that the protections would apply to all customers on default tariffs. However we note the intention that the protections would apply to the same group of customers currently covered by the WHD safeguard tariff which includes any customer on any evergreen tariff regardless of whether they have proactively engaged in the market to choose such a tariff. In our submission to Ofgem on the WHD safeguard tariff we proposed an exemption for evergreen tariffs where:

a) The customer has actively chosen the tariff; and

b) The nature of the tariff is such that most customers on the tariff interact with the supplier to buy most of their energy at prices lower than the evergreen price.

We also noted that our innovative PowerUp tariff, where customers purchase packages of energy in advance, has an evergreen default price for the rare occasions where customers have not chosen a package. (Typically fewer than [✂] % of customers are on this default option at any point in time.) While we recognise Ofgem did not offer an exemption for such tariffs in the Phase 1 WHD price cap, we think that wider proposals for a cap should allow for such tariffs to be exempted. Without an exemption, there is a risk that suppliers may simply withdraw such tariffs from sale to customers eligible for these financial protections, as the cost of creating a second variant of the tariff, or implementing an alternative approach for compliance for a small number of customers would be disproportionate. We think it is in customers' interests that they still have the option of choosing tariffs such as PowerUp.

Chapter 3 – Methodology

Question 6 – Which of our two options for setting the benchmark component of the safeguard tariff would be most effective?

Ofgem has concluded that of the five options it identified, only two would be feasible in the limited time available: (i) an approach based on the underlying methodology used by the CMA to calculate the prepayment tariff cap (with any methodological changes that can improve the benchmark in the time available) and (ii) a basket of market tariffs.

Ofgem was able to implement the first WHD price cap (coming into effect on 2 February 2018) on exceptionally short timescales, by compressing the normal consultation process and seeking the cooperation of suppliers to proceed with the existing PPM price cap methodology, even though that may not have been appropriate for the wider cap. In doing so it explained that this 'Phase 1' cap would soon be replaced by a 'Phase 2' cap (the cap currently being consulted on) which would allow time for a more appropriate methodology to be developed. We are therefore concerned that Ofgem has again ruled out a proper review of the methodology on grounds of time pressure. The CMA methodology is now based on very out-of-date information[5] and we are doubtful that the limited changes that Ofgem appears to be contemplating would be sufficient to yield a robust result.

We recognise that the 'Phase 2' cap is now also seen as temporary given the proposed Government initiative for a market-wide cap. However, given that timescales for implementing the market-wide cap will also be extremely tight, we do not agree with Ofgem's decision to limit the options in this way. We see it as of utmost importance that the cap is set on a sound methodology, properly applied, whether through Ofgem's work or, if necessary, following independent review of Ofgem's decision.

Our initial view is that both of the preferred price cap methodologies have significant drawbacks and we think Ofgem needs to undertake further analysis before an informed decision can be made on a methodology (which should not rule out consideration of wider options). Some of the key pros and cons of Ofgem's preferred two approaches are summarised in Table 1.

Table 1– Comparison of adjusted CMA methodology and basket of market tariffs methodologies

Criterion	Adjusted CMA methodology	Basket of market tariffs
Accuracy of level – extent to which cap accurately reflects required balance between preserving competition and protecting consumers	**Poor** – Given that Ofgem has ruled out a thorough review of the CMA methodology there is still significant risk that the level of the cap will be set too low	**Unclear** – involves significant degree of judgement on Ofgem's part in designing the basket and making necessary adjustments.
Predictability – extent to which suppliers can predict future levels of the cap and plan their business accordingly	**Easier to predict –** suppliers have experience of the PPM cap and have generally been able to predict levels with reasonable accuracy	**Harder to predict**--market price movements are a function of market dynamics as well as underlying cost and are difficult to predict

[5] When the cap is introduced the Ovo/First Utility benchmark data will be more than 3 years old.

Criterion	Adjusted CMA methodology	Basket of market tariffs
Volatility– level of variability from one charge restriction period to the next, which could lead to more frequent price changes by suppliers than would otherwise be the case	**Likely to be less volatile**	**Likely to be more volatile** – for same reasons as above
Responsiveness – ease with which level of cap can adjust to unforeseen input cost shocks	**Less responsive** – in the event of a cost shock Ofgem may not have time to update the methodology for the next charge restriction period, even assuming it has sufficient understanding of what is driving it	**More responsive** – the market is able to react relatively quickly to changing costs and reflect these in unregulated tariffs. Such changes should therefore feed through automatically to the next charge restriction period
Need for ongoing Ofgem intervention	**More need** – will continue to need detailed intervention from Ofgem in updating level of cap	**Less need** –if it can be made to work, this approach should adapt automatically with the market
Scope for gaming and market distortion – extent to which suppliers can game the level of the cap by design of market tariffs (and extent to which nature of tariffs on offer is distorted by the presence of the cap)	**Low risk**	**Significant risk** – will require careful design to mitigate (see answer to Question 7), and it is unlikely to be possible to eliminate entirely.

As noted above, we can see significant disadvantages with both approaches. The adjusted CMA approach is still likely to be based on an out of date baseline and may not strike the correct balance between promoting competition and protecting consumers. Disadvantages of the basket of tariffs approach include susceptibility to gaming, unpredictability/volatility and the risk that it has never been tried before in the UK.

Question 7 – Do you have any comments on the design issues for either of our two options?

<u>CMA price cap methodology</u>

A key concern with the CMA price cap methodology is the use of a baseline based on the DD tariffs of two mid-tier suppliers (making losses or unsustainably low profits) in June 2015. This baseline is methodologically weak for a number of reasons:

- it uses a very small sample of only two suppliers;
- it was based on prices at a single date;
- it will be more than three years out of date by the time the cap comes into effect;
- although the CMA attempted to adjust for the characteristics of these companies (loss-making, growth phase, extent of ECO/WHD obligations etc), this was not done in a transparent way and had to make do with limited historical data.

We would therefore strongly encourage Ofgem to review this baseline in the light of significantly changed market circumstances since June 2015. In particular, the mid-tier suppliers are now more mature and will have a longer time series of more representative

financial data, which suggests that Ofgem should be able to create a significantly more robust baseline (eg with a larger sample, not based on a single date, and a more transparent approach to making adjustments).

We have identified a number of more detailed issues with the CMA's methodology for setting the prepayment price cap and its estimates of payment method-related cost differences, which it is essential that Ofgem addresses if it decides to proceed with this option:

a) smart meter rollout costs;

b) dependence of cost-to-serve on mix of customers;

c) recovery of policy costs over a diminishing customer base;

d) electricity policy cost indexation – split between fixed and variable costs.

The first two issues are more complex in terms of the need for additional data, but given the magnitude of the discrepancies cannot be ignored for the purpose of the price cap. Ofgem should calculate the adjustments as accurately as it can within the time available, with a view to refining the adjustment if necessary, for subsequent charge restriction periods (or in the context of the Government's proposed market wide price cap).

The latter two issues are smaller in magnitude but involve relatively straightforward adjustments which can easily be accommodated within Ofgem's timetable without the need for any supplier-specific information gathering.

Further details of these adjustments are provided in Annex 2.

Basket of market tariffs

If Ofgem proceeds with considering the basket of market tariffs approach, it will be particularly important to think through the design and ensure that, as far as possible:

- there is a reasonable level of stability in the cap; at present there is a high degree of volatility in the pricing of products, depending on short term commercial strategies of the various market participants;

- that the basket reflects financially sustainable products rather than short term offers made for customer acquisition purposes

- opportunities are minimised for suppliers to game the basket and bias the level of the cap away from the optimum (either up or down);

- the presence of the cap and the basket of tariffs methodology does not unduly distort suppliers' decisions around their tariff offers (particularly where this may mean that consumers pay more than they otherwise would).

In general, large suppliers (with a higher proportion of customers covered by the cap) will have an incentive to ensure that their cheapest tariffs are not included in the basket; smaller suppliers (with few customers covered by the cap) may have the opposite incentive, if they think they can thereby reduce the profitability of their larger rivals. In this context, it is essential that tariffs from small obligation-exempt suppliers are excluded (or explicitly adjusted for), since this would otherwise distort the level of the cap in a way that larger

obligated suppliers could not match. Similarly, it would be necessary for Ofgem to adjust smaller suppliers' tariffs for their lack of profitability (this was done by the CMA) and for the additional costs faced by larger suppliers as a result of their customer mix (see Annex 2, section 3).

We do not at this stage have a clear view as to how the basket can best be designed to be immune to gaming, but we would note that possible challenges with basket design could include:

- treatment of tariffs that are offered only for particular time windows (eg over weekends) – if the list of tariffs is defined by reference to a particular date, such tariffs might not be caught;

- inclusion criteria based on number of customers on the tariff – suppliers wishing to exclude their most competitive tariffs may be incentivised to 'fragment' their offering into a larger number of tariffs, each with fewer customers;

- unrepresentative tariffs – unless there is a minimum number of customers on a tariff for it to be included in the basket, the basket could be distorted by unrepresentative tariffs eg special offers or loss-leaders that are deliberately restricted in availability (eg geographically).

It has been suggested that Ofgem could design the basket in a way that would sufficiently dilute the influence of any one supplier's tariffs and hence their incentives to game (eg having 30 tariffs in the basket instead of the 10-15 mentioned in the consultation, and capping the number of tariffs from each supplier). We do not think that this is necessarily a solution. If the tariffs are not weighted by customer numbers, there remains a risk that the basket could be distorted by unrepresentative 'special offer' tariffs; and if the tariffs are weighted by customer numbers, a single tariff could still have sufficient impact on the level of the cap to distort a supplier's pricing decisions.

Finally, we think there are serious issues of practicability in introducing a basket methodology in short timescales. It is important for regulatory certainty and predictability that Ofgem defines the methodology for constructing the basket in advance, in a deterministic way that can be replicated by market participants without any Ofgem discretion. Conversely, given the risks of gaming identified above, and the fact that (as far as Ofgem is aware) this approach has never been used in the UK before, it seems risky to move straight to such a cap without first piloting and testing the methodology.

<u>Should level of cap vary by payment method?</u>

Ofgem suggests two main options for setting the level of the cap for customers on credit meters[6]:

a) a single blended cap for all customers on credit meters, regardless of payment method;

b) different caps for customers paying by direct debit and by standard credit.

The choice of approach involves a trade-off between fairness and efficiency. As Ofgem points out, there is a large difference in cost to serve between direct debit (DD) and standard

[6] We assume Ofgem's intention is that customers on prepayment meters would remain subject to the CMA's price cap methodology or would be subject to an Ofgem cap at the same level as the CMA's.

credit (SC). This difference is largely driven by the costs of bad debt and working capital associated with standard credit. Whilst the difference in working capital costs is largely a function of the payment method (DD customers typically incur negative working capital costs and SC positive), the difference in bad debt costs (and part of the difference in working capital) is driven by a subset of expensive-to-serve customers who do not pay their bills on time and are typically in financial difficulty.

Considerations of fairness suggest that the additional costs of expensive-to-serve customers should be socialised across the wider customer base, ie all customers on credit meters, since if the costs imposed by such customers are recovered from SC customers alone (who are fewer in number than DD), it will disproportionately penalise customers on SC who *do* pay their bills on time. (Indeed, socialising the costs across the wider customer base could be justified on the grounds that the requirement on suppliers to continue to serve these unprofitable customers is a form of social obligation.) Conversely, it might be argued that is unfair for customers paying by DD not to be rewarded for their lower working capital costs.

Considerations of efficiency would suggest that the additional costs of SC should be reflected in a higher price, since if the cap is the same for DD and SC, some customers may switch from DD to SC to benefit from the more favourable credit terms (equivalent to a 0% interest loan) and others may choose not to switch from SC to DD. In either case, this would be inefficient in terms of overall supplier costs.

The optimum may be some form of compromise, where bad debt costs are socialised across DD and SC but working capital cost differences are reflected in a differential between the DD and SC caps. However, given the risk of market distortions, we think Ofgem should be very cautious about adopting a single blended cap.

Amount of headroom

A key design decision for Ofgem will be the level of competitive headroom. We think there are good reasons why Ofgem should include a somewhat larger headroom allowance than in the CMA's prepayment cap (nominally £30 for medium consumption customers):

- The optimum amount of headroom reflects a balance between competition and consumer protection. In the case of the prepayment price cap, the opportunities for competition are limited by technical constraints, which are not present for credit meters. Other things being equal, this suggests that the impact on competition should be given a greater weight for credit meters and the optimum level of headroom should be higher.

- The CMA headroom allowance was eroded from the start by the CMA's practice of justifying low values for other elements of the cost stack by reference to the availability of headroom.

The case for more generous price headroom is supported by the experience of New South Wales (NSW) in Australia, which illustrated how price controls can reduce price dispersion and weaken competition – and conversely, how relaxing the price control can allow competition to flourish.[7] In the 2007-10 price control period, the level of 'incentive' (a measure of headroom in the price cap) was relatively low and the number of customers opting for regulated as opposed to 'market' prices increased over the period. In the next price control period 2010-2013, the incentive was increased four-fold (to approximately 10%

[7] Independent Pricing and Regulatory Tribunal of New South Wales (IPART) (2013): "*Review of Regulated Retail Prices and Charges for Electricity*", p. 114 (table 9.2).

of total costs), resulting in a much looser price control. This caused price dispersion to widen from 4-5% (in 2009/10) to 5-15% (in 2012/13), the switching rate to increase from 12% to 19% and the number of customers on regulated tariffs to fall from 65% to 40%, leading the regulator to conclude that the price control could be removed altogether.

Annex 2

DETAILS OF SUGGESTED AMENDMENTS TO CMA METHODOLOGY

1. Introduction

This annex provides details of the areas of the CMA methodology for setting the prepayment price cap that Ofgem will need to address if it decides to proceed with this option. These relate to:

a) smart meter rollout costs;

b) dependence of cost-to-serve on mix of customers

c) recovery of policy costs over a diminishing customer base;

d) electricity policy cost indexation – split between fixed and variable costs.

2. Smart meter rollout costs

The most important adjustment that Ofgem needs to make to the price cap methodology is to properly reflect the costs of smart meter rollout. The CMA's final report argues that no explicit allowance was needed for prepayment meters because the two benchmark companies (Ovo and First Utility) had already started rolling out smart meters, and costs should therefore have been reflected in their tariffs; and because the net costs for prepayment meters were likely to be less than for meters on average, due to the additional scope for operational savings.[8]

Even if smart rollout costs are substantially reflected in the Ovo and First Utility benchmark prepayment tariffs (which we doubt), the Government's own cost-benefit model suggests that the costs for smart credit meters will be significantly higher (due to the additional savings available from smart PPMs). Table 2 derived from the BEIS (2016) Cost Benefit Assessment suggests that over the period 2018-2020, the average net cost for suppliers is £21 for credit meters compared to £2 for PPMs. (Annex 3 shows how this table is derived).

Table 2 – Supplier costs & benefits in price cap period, derived from BEIS CBA (2016)

	Supplier costs and benefits (2018-2020 average)		
	All	**Credit**	**PPM**
Costs (£m, 2011 money)	945	794	151
Benefits (£m, 2011 money)	524	379	144
Net costs (£m, 2011 money)	421	414	7
Number of customers (million)	*25*	*21*	*4*
Cost per dual fuel customer (2011 money)	£17	£20	£2
Cost per dual fuel customer (2015 money)	£18	£21	£2

In practice, we believe that the BEIS model very substantially (perhaps by a factor of two or more) under-estimates the current costs to suppliers of smart meter rollout. This is for two main reasons. First, there have been very significant increases in costs since the information behind the BEIS (2016) model was gathered. These include increased DCC

[8] CMA Final Report, paras 14.237 to 14.238

costs, increased installation costs (due to lower than expected customer engagement), increased meter costs (due to delays in SMETS2 and a higher proportion of SMETS1 meters being rolled out) and reduced benefits due to rollout delays (necessitating longer double-running of systems). Second, we suspect that, even based on suppliers' views of costs in 2016, the BEIS model may have presented an over-optimistic view from the supplier perspective.

We are in the process of analysing our costs in more detail, and how they can best be reconciled to the BEIS model, and we intend to submit more detailed information to Ofgem in due course.

Given the importance of this issue, and the frequency with which cost estimates are evolving, it is vital that Ofgem undertakes a thorough information gathering exercise ahead of setting the price cap. We believe it should be possible to come up with an appropriate net cost figure for the typical supplier (cost per customer per year) in sufficient timescales to meet Ofgem's ambitions for implementation of the safeguard tariff. This should be subject to regular review (involving further information requests if necessary) so that if circumstances change between one charge restriction period and the next, the level of the price cap can be adjusted accordingly.

3. Dependence of cost-to-serve on mix of customers

The CMA price cap methodology failed to take account of the differences in cost to serve between suppliers that resulted from their mix of customers:

- Larger suppliers have on average a much higher proportion of expensive-to-serve customers than small suppliers who are able to 'cherry-pick' their customer base.

- Different 'Big 6' suppliers vary widely in their historical success in encouraging customers to move from the more expensive standard credit (SC) payment method to the cheaper direct debit (DD). Those who have been most successful are left with a higher concentration of expensive-to-serve customers amongst their SC base[9] and hence a higher DD-SC cost differential.

The additional cost of serving these expensive-to-serve customers is not a sign of inefficiency (as the CMA appears to have assumed) but rather reflects the fact that large suppliers have no option but to supply these unprofitable customers and in doing so are fulfilling a form of social obligation.[10]

<u>Big 6 versus other suppliers</u>

An indication of the extent of the difference in customer mix between 'Big 6' and smaller suppliers can be obtained from analysis of Ofgem's social obligation reporting information on customers in debt (Table 3)

[9] Customers in the 'expensive-to-serve' category will often not be in a sufficiently secure financial situation to be able to pay by DD.

[10] That is not to say that suppliers' approach to debt management etc cannot be improved upon, but in general suppliers are under pressure from the regulator to prioritise the interests of such vulnerable customers as opposed to reducing the costs of serving them.

Table 3– Ofgem's social obligation reporting 2016: 'Big 6' versus small and medium suppliers

	Electricity			Gas		
	Big 6 suppliers	Other suppliers	Total	Big 6 suppliers	Other suppliers	Total
In debt repayment[11]	653,583	28,178	681,761	558,269	19,655	577,924
In arrears[12]	437,872	76,002	513,874	341,508	51,930	393,438
Total in debt[13]	1,091,455	104,180	1,195,635	899,777	71,585	971,362
Market share Q4 2016[14]	*85.0%*	*15.0%*	*100.0%*	*83.0%*	*17.0%*	*100.0%*

This can be used to estimate how much more prevalent such customers are amongst the Big 6 compared to other suppliers (the 'ratio of incidence') as shown in Table 4 .

Table 4 – Difference in customer mix: 'Big 6' versus small and medium suppliers

	Ratio of incidence for Big 6 vs others[15]		
	Electricity	**Gas**	**Average**
Customers in debt repayment arrangements	4.1	5.8	5.0
Customers in arrears[16]*	1.0	1.3	1.2
Total customers in debt (repayment & arrears)	1.8	2.6	2.2

The average ratio of incidence varies between 2.2 (based on all customers in debt) and 5.0 (based on customers in debt repayment arrangements). The difference between these two measures may partly reflect the fact that Big 6 suppliers are more efficient than small suppliers at managing customer debt, and partly the more serious/persistent nature of the debt associated with those in debt repayment arrangements.

The additional costs associated with these un-creditworthy customers include:

- bad debt write-off;
- working capital costs – because of the additional working capital tied up in debt balances;
- higher meter reading costs – on average these customers are less likely to supply their own meter readings necessitating more frequent meter reading visits;
- call centre costs – eg additional calls associated with debt management.

The magnitude of the issue can be illustrated by considering ScottishPower's bad debt costs. ScottishPower uses two metrics for bad debt costs, the amount provided for in each year and the amount actually written off in the year.[17] In 2017 the bad debt write off was around [✂] on both metrics. If this bad debt cost was socialised across all ScottishPower's

[11] Ofgem 'Monitoring company performance – annual reporting 2016' ,page 2, https://www.ofgem.gov.uk/system/files/docs/2017/10/monitoring_social_obligations_-_2016_annual_data_report.pdf

[12] Derived from Ofgem 'Monitoring company performance – annual reporting' page 28 and 'Vulnerable consumers in the retail energy market: 2017', Figure 8

[13] Derived from Ofgem 'Vulnerable consumers in the retail energy market: 2017', page 25 and 'Vulnerable consumers in the retail energy market: 2017', Figure 8

[14] Source: https://www.ofgem.gov.uk/data-portal/electricity-supply-market-shares-company-domestic-gb, and https://www.ofgem.gov.uk/data-portal/gas-supply-market-shares-company-domestic-gb

[15] Calculated as (Big 6 number in debt / Big 6 market share)/(Other number in debt / Other market share)

[16] Defined as more than 3 months late in making a payment, but with no debt repayment arrangement set up

[17] Our provisions policy has been developed over time so that we can predict with reasonable accuracy what proportion of live debt (of different ages) will ultimately be written off, and when an amount of debt is finally written off it should on average have been fully provided for. (Bad debt is normally written off [✂] months after an account goes 'Final' – ie the customer has left us – but in some cases there may be a longer lag).

non-prepayment customers (circa [✂] million services) it would equate to circa [✂] per service or [✂] per dual fuel customer. If small and medium suppliers have (conservatively) half as many un-creditworthy customers, their bad debt costs will be around [✂] less than ScottishPower per dual fuel customer.

We believe this is an area where Ofgem should be seeking supplier-specific information through formal information requests. As noted above (Annex 1, Question 7) we think there may be a case, on fairness grounds, for socialising this cost difference over all DD and SC customers.

Big 6 versus other suppliers

ScottishPower has been one of the most successful suppliers in encouraging its SC customers to move to the cheaper DD payment method, as shown in Table 5.

Table 5 – Payment method splits

	SC	DD	PPM	SC/(SC+DD)
All suppliers (BEIS, Sep 2017)[18]	23%	63%	14%	27%
ScottishPower (Oct 2017)	[✂]	[✂]	[✂]	[✂]

We do not have the equivalent figures for the other Big 6, but given that other suppliers are likely to have a significantly smaller percentage of SC customers than ScottishPower, and given that the industry average is 23%, we estimate the average for the Big 6 is likely to be around 26%.

In its Final Report the CMA noted that the Big 6's bad debt costs represented on average 36% of the total cost to serve each SC customer,[19] but for Scottish Power, bad debt costs were quoted as 54% of the total cost to serve each SC customer[20]. The CMA implied that this was down to inefficiency on ScottishPower's part – or at least did not acknowledge that there might be alternative explanations. However, if one assumes that ScottishPower has the same number of 'expensive to serve' customers as the other Big 6 as a proportion of its customer base, one would expect, based on the SC splits above, that ScottishPower's bad debt costs as a share of SC cost to serve would be (36%*26%/[✂]% = [✂]% slightly *more* than the 54% quoted by the CMA.

Clearly Ofgem will need to investigate how bad debt and other costs vary between different suppliers, but it seems likely that differences in the proportion of customers on SC (rather than differences in efficiency) within the Big 6 may largely account for the wide range of the CMA's estimates for the cost to serve difference between DD and SC (£84-£150)[21]. Ofgem should therefore consider carefully whether it is appropriate to use the 'central' value of the range (as the CMA did for prepayment costs) or whether it may be appropriate to attach more weight to the upper end of the range of costs, where these values can be explained as set out above.

[18] Derived from BEIS tables 242, 243 and 252 (https://www.gov.uk/government/statistical-data-sets/quarterly-domestic-energy-price-stastics)
[19] CMA Final Report Appendix 9.8, para 176
[20] CMA Final Report Appendix 9.8, para 183
[21] Condoc Table 3, page 54

4. Recovery of policy costs from a diminishing customer base

The CMA's policy cost indexation methodology assumes that policy costs are recovered from a constant total number of customers. This ignores the fact that small suppliers are exempt from two of the key obligations contributing to policy costs, ECO[22] and WHD[23], and the market share of such exempted suppliers is increasing.

Table 6 – Policy costs included in CMA indexation and associated exemption criteria

	Cost per DF customer
ECO	£27[24]
WHD	£13[25]
Total	£40

Table 7– Increasing market share of obligation-exempt suppliers[26]

	Big 6	Mid-tier	Small
Q2 2015	90%	9%	2%
Q2 2017	82%	10%	8%

The market share of small suppliers has increased from 2% to 8% since June 2015, the base date for the CMA price cap model. For the purpose of this estimate we assume that small suppliers are all exempt from ECO and WHD and that mid-tier suppliers are fully-obligated, but this analysis can refined if necessary by Ofgem using market share data for individual suppliers.

The effect of the diminishing customer base is to increase the cost burden for obligated suppliers by an additional 6.1% over and above the amount allowed for by indexation. Assuming a cost per dual fuel customer of £40 (Table 6) for ECO and WHD, the diminishing customer base will have increased costs per obligated supplier by around **£2.46** (6.1% x £40) per dual fuel customer above the level allowed for in the CMA methodology.

Ofgem could address this issue by defining a second index that relates to the size of obligated customer base for ECO and WHD, and using that index to increase an element of the policy costs that corresponds to ECO and WHD.

5. Electricity policy cost indexation – split between fixed and variable costs

The CMA assumed an incorrect split between fixed and variable costs (ie costs which scale per customer and costs which scale per kWh) for 'Policy' costs and 'Other' costs for electricity. Because of the way that the indexation scheme works, this means that the cap for low consuming customers will be up to £20 higher than it should be in 2018/19 (increasing to £31 by the 2020/21), whilst for customers with twice the medium consumption

[22] Energy suppliers are obligated under ECO measures if they have over 250,000 customers and supply over 400GWh of electricity or 2000GWh of gas. Obligations are reduced for suppliers providing over 400GWh but less that 800GWh of electricity or over 2,000GWh but less than 4,000GWh of Gas.
[23] The WHD scheme has three different elements: the Core Group, Broader Group and Industry Initiatives. Energy suppliers with over 250,000 domestic customers in the previous year are required to participate in each element of the scheme. Some smaller suppliers also voluntarily participate in the Core Group part of the scheme
[24] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/586266/ECO_Transition_Final_Stage_IA__For_Publication_.pdf, page 13 para 49.
[25] Source: ScottishPower CSS for 2015.
[26] Source: https://www.ofgem.gov.uk/data-portal/electricity-supply-market-shares-company-domestic-gb, https://www.ofgem.gov.uk/data-portal/gas-supply-market-shares-company-domestic-gb

it will be the same amount lower. Low consuming customers (who include a relatively high proportion of vulnerable consumers) will therefore receive significantly less protection than they should, and higher consuming customers more protection.

The basis for these estimates is as follows. The CMA's assumed breakdown of the price cap at nil and medium consumption (for single fuel electricity, East Anglia region) is shown in Table 8.

Table 8 Price cap for single fuel electricity at base date (East Anglia region)

	Price cap	
	Nil consumption	Medium consumption
Wholesale energy		£189
Network		£118
Policy	£26	£67
Other	£29	£75
PPM uplift	£24	£24
Headroom	£3	£15
Price cap (medium)	£82	£488

For comparison, Table 9 shows the breakdown of policy costs for ScottishPower's[27] domestic electricity supply segment in 2015 taken from the consolidated segmental statements (CSS). For costs which scale according to the number of customers, the table shows the per customer cost; and for costs which scale according to the energy supplied, it shows the cost for a customer with medium consumption of 3,200 kWh.[28]

Table 9 -ScottishPower policy costs for domestic electricity segment in 2015 (from CSS)

	SP CSS for 2015 (£m)	Cost for typical customer		
		per customer	per 3,200 kWh	Total
Renewables Obligation Certificates (ROCs)	155.6		£40	
Feed in Tariffs (FITs)	46.2		£12	
Energy Companies Obligation (ECO)	26.1		£7	
Warm Home Discount (WHD) (including admin)	20.0	£6		
Assistance for Areas with High Electricity Distribution	2.7		£1	
Administering the Government Electricity Rebate (GER)	0.5		£0	
Total environmental and social obligations	251.1	£6	£59	£65

The total policy cost for a customer with medium consumption (£65) is close to the CMA's assumed value of £67, but the policy cost at nil consumption (equivalent to the per-customer cost) is £6 compared to the CMA's £26, suggesting that the CMA figure is approximately £20 too high. Furthermore, the £6 corresponds to WHD costs which the Office for Budget Responsibility (OBR) projects to remain constant. Application of the indexing scheme to the CMA's £26 figure will lead to a significant increase in the cap for nil consumption customers, when their cap should not increase at all in respect of policy costs.

[27] We provide ScottishPower's figures as they are readily to hand, but a similar split would be obtained for other obligated suppliers.

[28] These are derived using ScottishPower's average number of electricity customers (3.09 million) and total electrical energy supplied (12.5TWh), also taken from the CSS

The split between fixed and variable policy costs can be adjusted in a way that keeps the overall split between fixed and variable costs unchanged. This can be done by making offsetting adjustments to the split of 'Other' costs, where it appears that the CMA has under-estimated the extent of the fixed component. The main elements of 'Other' costs expected to scale with consumption are bad debt costs, working capital costs and profit, all of which are likely to be relatively small. The majority of 'Other' costs will therefore scale with customer numbers, and one would expect the value at nil consumption to be close to the value at medium consumption (£75).

We therefore suggest that Ofgem amends the CMA methodology for the purpose of this cap by:

a) reducing the policy cost at nil consumption by £20 and increasing the 'Other' cost by the same amount, keeping the total cap at nil consumption unchanged;

b) assuming a flat indexation of policy costs at nil consumption (consistent with approach to gas policy costs, which also relate to WHD).

The impact of these corrections is illustrated in Figure 1 (for 2020/21) and in Table 10, which shows the impact of policy indexation on the price cap in each year of the price control, assuming all other elements remain unchanged. This demonstrates that there will be significant distributional effects as a result of failing to index policy costs correctly, with the nil consumption cap being £30 too high towards the end of the period and the cap for consumptions higher than medium being too low.

Figure 1: Impact of corrected policy cost indexation on price cap

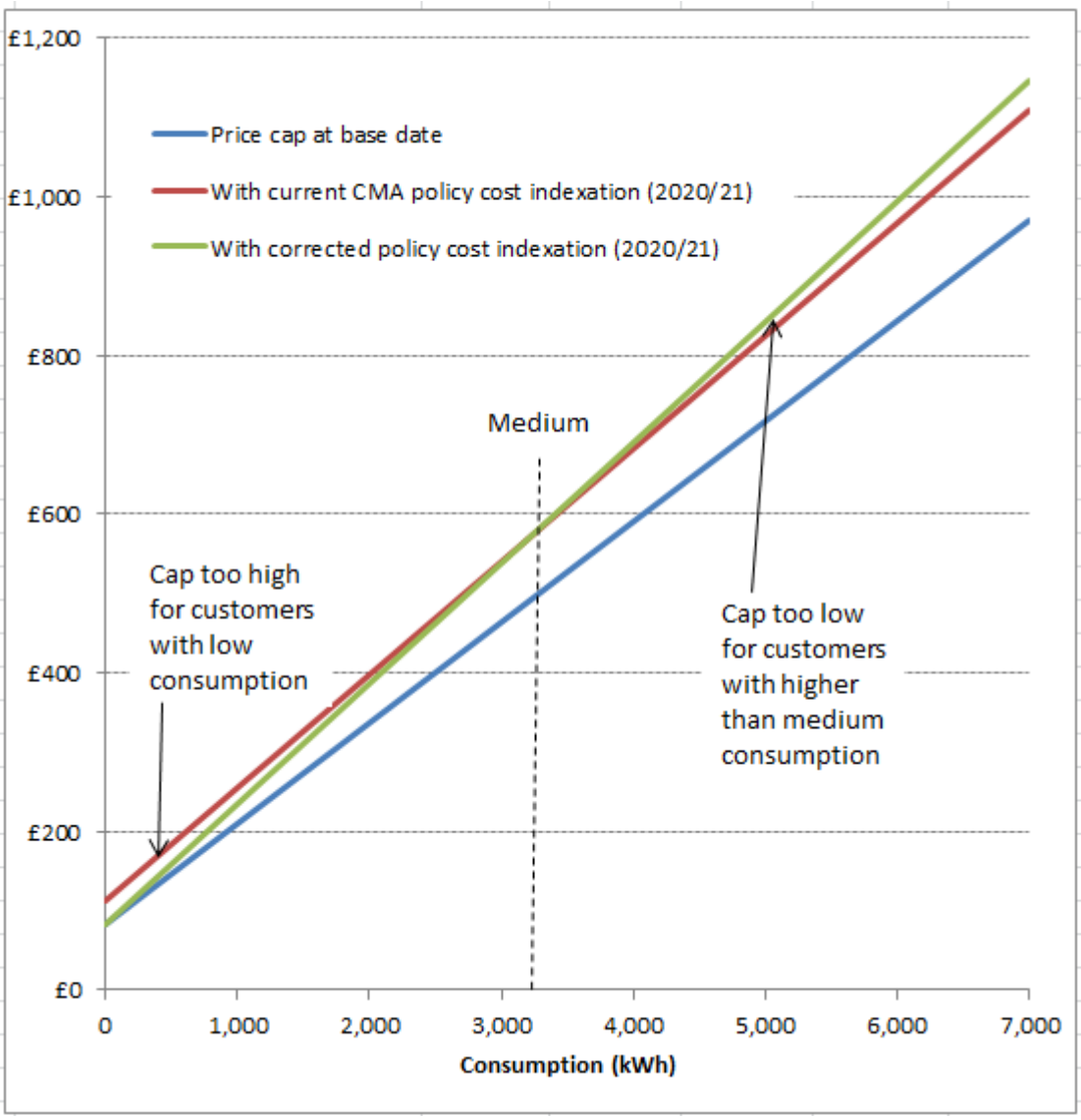

Table 10 - Impact of corrected policy cost indexation on price cap

	Base date	2016-17	2017-18	2018-19	2019-20	2020-21
Electricity policy index (£bn)	5.6	6.6	8.0	9.9	11.4	12.3
Impact of policy cost indexation on price cap						
Nil consumption	£82	£87	£93	£102	£109	£113
Medium (3,200 kWh)	£488	£500	£517	£540	£558	£568
Impact of policy cost indexation on price cap (corrected)						
Nil consumption	£82	£82	£82	£82	£82	£82
Medium (3,200 kWh)	£488	£500	£517	£540	£558	£568
Change in price cap						
Nil consumption			-£11	-£20	-£27	-£31
Medium (3,200 kWh)			£0	£0	£0	£0

Annex 3

DERIVATION OF SUPPLIER COSTS AND BENEFITS OF SMART METER ROLLOUT FROM BEIS (2016) COST BENEFIT ASSESSMENT

1. Introduction

In Annex 2 section 2 we provided an estimate of the net cost to suppliers of smart meter rollout over the period of the price control (2018 to 2020) derived from information in the Cost Benefit Assessment (CBA) published by BEIS in 2016[29]). This annex explains how those estimates were derived from the BEIS data.

2. Cost and benefit categories relevant for purpose of price cap

The BEIS CBA considers costs and benefits from a societal perspective, so the first step is to select the subset of costs and benefits of relevance to a supplier in the context of a price cap.

We therefore omit the following cost:

- Energy costs of smart meters in home – since these costs will be experienced by consumers not suppliers

And the following benefits:

- Consumer benefits (Energy Savings and Microgeneration) – since these benefits will be realised by consumers not suppliers

- Business benefits – Networks – these benefits are relevant to suppliers, but will be covered already by network cost indexation in the CMA price cap methodology, so are not relevant for the purpose of the price cap;

- Business benefits – Generation (Short run marginal cost savings from ToU, Avoided investment from ToU) – these benefits are relevant to suppliers, but will be covered already by wholesale cost indexation in the CMA price cap methodology, so are not relevant for the purpose of the price cap

- UK-wide benefits (Global CO2 reduction, EU ETS from energy reduction, EU ETS from ToU, Air Quality) – since these will not be realised by suppliers.

The effect of excluding these categories is shown in Table 11 overleaf. The table also shows the effect of disaggregating costs between prepayment and credit meters. We assume that all costs and benefits scale pro rata to the number of meters, with the exception of 'Avoided PPM COS premium' which relates purely to prepayment meters.

[29] Smart meter roll-out cost benefit analysis, BEIS, August 2016

Table 11 – Domestic smart meter rollout costs and benefits from BEIS CBA (2016)[30]

	NPV (base year 2016, 2011 money)			
	UK societal view	Supplier view		
		All meters	Credit meters	PPMs
Total Costs (Domestic)				
In premise costs	**6,135**	**6,135**	**5,153**	**982**
Meters & IHDs	2,551	2,551	2,143	408
Installation of meters	1,942	1,942	1,631	311
Operation and maintenance of meters	626	626	526	100
Communications equipment in premise	1,016	1,016	853	163
DCC related costs	**2,036**	**2,036**	**1,710**	**326**
DCC Licence	230	230	193	37
Data Services	377	377	317	60
Communications services (exc hubs)	1,334	1,334	1,121	213
Other service providers	95	95	80	15
Suppliers' and other participants system costs	**1,001**	**1,001**	**841**	**160**
Supplier capex	536	536	450	86
Supplier opex	306	306	257	49
Other industry capex	69	69	58	11
Other industry opex	90	90	76	14
Other costs	**1,384**	**732**	**615**	**117**
Energy costs of smart meters in home	652		-	-
Disposal	11	11	9	2
Pavement reading inefficiency	271	271	228	43
Legal and organisational	258	258	217	41
Marketing	192	192	161	31
	10,556	**9,904**	**8,319**	**1,585**
Total Benefits (Domestic)				
Consumer benefits	**3,856**	**-**	**-**	**-**
Energy Savings	3,807		-	-
Microgeneration	49		-	-
Business benefits - Supplier	**7,953**	**7,953**	**5,762**	**2,191**
Avoided site visits	2,860	2,860	2,402	458
Inbound enquiries	986	986	828	158
Customer service overheads	171	171	144	27
Debt handling	970	970	815	155
Avoided PPM COS premium	1,093	1,093		1,093
Remote (dis)connection	221	221	186	35
Reduced theft	219	219	184	35
Customer switching	1,433	1,433	1,204	229
Business benefits - Network	**749**	**-**	**-**	**-**
Business benefits - Generation	**899**	**-**	**-**	**-**
UK-wide benefits	**892**	**-**	**-**	**-**
	14,349	**7,953**	**5,762**	**2,191**
Net cost (benefit)	**-3,793**	**1,951**	**2,557**	**-606**

3. Time profile of costs and benefits

The BEIS CBA considers the NPV of costs and benefits over an 18 year period (2013 to 2030), using a social time preference discount rate of 3.5% and an NPV base year of 2016 (see Table 12).

In order to estimate costs and benefits relevant to the price control, we consider the average costs and benefits over the three year period 2018-2020. The reason for focusing on this

[30] BEIS Cost Benefit Assessment, Part II Technical annex, page 48

period (rather than the period to 2030) is that in a competitive market companies cannot be expected to defer recovery of the higher costs incurred in this period until later years.

Table 12 - Annual profile of monetised costs and benefits for the domestic sector[31]

	Discount factor (3.5%, 2016 base year)	**Total costs (£m, 2011 prices)**	**Total benefits (£m, 2011 prices)**
2013	*1.109*	106	8
2014	*1.071*	96	25
2015	*1.035*	255	52
2016	*1.000*	433	113
2017	*0.966*	576	274
2018	*0.934*	848	611
2019	*0.902*	1,071	995
2020	*0.871*	1,102	1,228
2021	*0.842*	977	1,323
2022	*0.814*	945	1,446
2023	*0.786*	944	1,467
2024	*0.759*	913	1,532
2025	*0.734*	914	1,596
2026	*0.709*	915	1,645
2027	*0.685*	908	1,659
2028	*0.662*	743	1,663
2029	*0.639*	709	1,700
2030	*0.618*	730	1,742
NPV		**10,556**	**14,349**
Total	*15.135*	**13,185**	**19,079**
2018-2020 mean		1,007	945
2018-2020 mean (%)		8%	5%

4. Smart meter rollout costs for purpose of price cap

Table 12 shows the societal costs and benefits over the three year period 2018-2020. The next step is to convert these to supplier-view costs and benefits over the same period. To do so we must assume that the cost and benefits which we subtracted have the same year to year phasing as the overall cost and benefits. This is likely to be a reasonably good approximation as the benefits in the BEIS model mostly appear to scale with the cumulative number of smart meters rolled out.

The calculations are shown in Table 13. To illustrate, the average supplier cost in 2018-2020 is equal to the supplier cost NPV (£9,904m) times the average societal cost in 2018-2020 (£1,007m) divided by the societal cost NPV (£10,556), which gives £945m.

The cost per customer is then calculated by dividing by the notional number of dual fuel customers (taken to be the average of the number of electricity and gas customers).

[31] BEIS Cost Benefit Assessment, Part II Technical annex, page 7

Table 13 – Net cost of smart meter rollout for suppliers during period of price cap

	Societal view		Supplier view					
	NPV	18-20 mean	NPV 2013-30			2018-2020 mean		
			All	Credit	PPM	All	Credit	PPM
Costs (£m, 2011 money)	10,556	1,007	9,904	8,319	1,585	945	794	151
Benefits (£m, 2011 money)	14,349	945	7,953	5,762	2,191	524	379	144
Net costs (£m, 2011 money)	-3,793	62	1,951	2,557	-606	421	414	7
DF customers (million)			*25*	*21*	*4*	*25*	*21*	*4*
Net cost per DF customer								
(2011 money)			£78	£122	-£151	£17	£20	£2
(2015 money)			£83	£129	-£160	**£18**	**£21**	**£2**

The cost per dual fuel customer (2015 money) is thus £21 for a credit meter and £2 for a prepayment meter, based on the BEIS model.

As explained above (Annex 2, section 2) we believe that the BEIS model is now out of date and significantly underestimates the costs of smart meter rollout. However, the calculations above set a lower bound on the size of the adjustment that Ofgem will need to make.

ScottishPower
February 2018