

Policy consultation overview

Question 1: Which approach for setting a benchmark for efficient costs do you think would be most appropriate?

1. It is essential that whatever methodology is used by Ofgem to set the Default Tariff Cap, it must allow for legitimate differences in costs, including costs to serve different customers reflecting their varying needs and preferences. A failure to do so would have serious implications for consumers, the market and risks creating financeability issues for suppliers.
2. Given this requirement, we are pleased to see that Ofgem has ruled out using Option 1, a market basket approach.
3. In terms of the methodology to choose, in principle any of the three remaining options could work, if properly set and adjusted. However, we do not believe that the updated reference price can realistically be achieved in Ofgem's (self-imposed) timescales given its current stage of development and the multiple adjustments that Ofgem will need to apply to make it fit for purpose – all of which would need to be subject to consultation. We set out our concerns about this in more detail in our response to Appendix 3 (and other related Appendices).
4. Ofgem puts some weight on the fact that the industry has “experience” and an “understanding” of the adjusted safeguard tariff (para 2.43). This is, at best, a second order consideration. Ofgem should pursue the methodology that is most likely to achieve the requirements of the Bill. In any event, if industry's experience is that a particular approach is not fit for purpose, that would be a reason not to use it unless the flaws in the approach are corrected.
5. The changes to the PPM tariff cap methodology that Ofgem has put forward for consideration in the consultation paper – relating to payment method cost differentials, smart metering costs, overhead costs, customer acquisition costs and operating costs – all have the potential to improve the methodology. The adjustments could ensure that the methodology better reflects the costs and risks that efficient suppliers face. Our issue with the current consultation is that insufficient information has been provided about how these adjustments will be made or what they amount to. Ofgem will need to provide this information and ensure it is subject to consultation.
6. However, these are not the only concerns with the existing PPM methodology that need to be addressed. In particular, Ofgem is not proposing to make any changes to the methodology that the CMA used to estimate and update wholesale costs over time, even though this approach significantly understates the wholesale costs that any supplier could expect to achieve, irrespective of their chosen hedging strategy. Changes should also be made to reflect an appropriate competitive profit margin and headroom allowance. We would expect to see these addressed if this option is applied.
7. Our more detailed comments regarding the adjusted safeguard tariff methodology are covered in our response to Appendix 2 (and other related Appendices).

8. We agree with Ofgem that a bottom-up approach to estimating an efficient level of costs would have a number of advantages. As Ofgem recognises, a well-designed bottom-up methodology will:
 - provide transparency as to which costs are included in the benchmark;
 - provide confidence as to how each element of costs is treated under the cap; and
 - ensure that a valid comparator is constructed.
9. The greater transparency associated with a bottom-up approach will arguably enable Ofgem and industry stakeholders to identify and work through these difficulties more effectively than would be the case with a “top-down” approach based on benchmark suppliers. However, it does require Ofgem to address the challenges it identifies in an appropriate manner for this price cap methodology to provide robust results.
10. In particular, as Ofgem states “a supplier that is operating efficiently may have higher or lower costs due to the nature of their customer base (such as the proportion of vulnerable customers), or their own circumstances (such as the stage of their smart meter rollout, or their size” (para 2.29). Ofgem has said very little to date about how it will take this into account. The fact that this exercise is “challenging” (para 2.31) does not negate the requirement to do it properly.
11. We discuss our views on the issues raised in Appendix 4 (and other related Appendices).

Question 2. What are your views on the issues we should consider when setting the overall level of the cap, including the level of headroom?

12. In its Consultation Overview Document, Ofgem recognises that – in addition to allowing for the efficient level of costs that a supplier can be expected to incur, including a reasonable profit margin to allow suppliers to cover their cost of capital (which we believe should include risk capital) – it must also build an additional amount of headroom over and above these costs into the cap.
13. While we welcome Ofgem’s intention to give careful thought to the appropriate level of headroom, it must be emphasised that headroom is not an “optional” component of the proposed tariff cap. As we have explained in previous submissions, it is essential that an explicit headroom allowance is built into the tariff cap over and above the efficient cost of capital, irrespective of the methodology that Ofgem is minded to follow for calculating the efficient level of costs.
14. Ofgem’s treatment of “headroom” throughout the consultation appears to be serving two very distinct purposes.
15. First, “competitive headroom”, which is required to provide sufficient space for competition and maintain incentives for customers to switch by enabling an adequate level of price dispersion in the market.
16. Second, “costs headroom”, which must be added to account for errors, uncertainties and variations in the level of efficient costs that are not accounted for elsewhere in the cap design.

17. These two forms of headroom are very different in nature. The level of each of them must be assessed independently; additional headroom for one purpose cannot compensate for reduced headroom for the other. An allowance that is designed to allow for cost uncertainty cannot be simultaneously used to safeguard effective competition in this way: uncertainty allowances would ensure that suppliers could still finance their activities in the event that Ofgem understated the efficient level of cost that a supplier would incur, but they would then leave no room for competition.
18. We are concerned that in the consultation document, Ofgem appears to be conflating these different considerations for the purposes of setting a single headroom allowance that will both support competition and allow for cost uncertainty. While these are both critically important considerations, they should be treated separately and additively. A single allowance designed to solve both of these issues would – at best – be highly opaque and – at worst – could result in the cap being set at a level that neither allows suppliers to finance their efficiently incurred costs nor allows scope for effective competition.

Competitive headroom

19. An allowance for “competitive” headroom within Ofgem’s methodology for determining the cap will be critical if Ofgem is to meet key requirements set out in the Bill, which are that Ofgem’s methodology must:
 - set the cap “at a level that enables holders of supply licences to compete effectively for domestic supply contracts”; and
 - maintain “incentives for domestic customers to switch to different domestic supply contracts”.
20. In the absence of a separate competitive headroom allowance over and above the estimated efficient costs that suppliers incur in supplying default tariff customers, domestic tariffs across the market will converge on the level of the cap. This is because an efficient supplier would not be able to sustain prices below the level of the cap, and would be prevented from pricing at any higher price level by the cap itself.
21. Effective competition could not be sustained in such an environment, because customers would correctly perceive that they would have little to gain financially from shopping around for deals, which would strongly disincentivise them from engaging in the market. The role of competitive headroom is to create enough space to support the level of price dispersion required to maintain customers’ incentives to switch. In this respect, setting an appropriate allowance for headroom is a key differentiator between a retail price “cap”, and a direct price control, such as would be set for a network monopolist. The reasons why the tariff cap must not simply be treated as a “proxy for competition” (as with a network monopolist price cap) are further set out in paras 26-30 of the Legal Annex.
22. Since the Bill explicitly requires Ofgem to maintain consumers’ incentives to switch, there is a clear legal imperative – as well as a strong logical rationale – to build a competitive headroom allowance of this nature into the cap. As set out in the Legal Annex, clause 1 (6)(a) to (d) are intended to work together in harmony, not collision, and to be reconcilable. To achieve this Ofgem must establish whether – and if so how far – existing levels of price dispersion can be reduced whilst maintaining customers’ incentives to engage in the market and switch supplier, and then calibrate the

competitive headroom allowance with a view to permitting at least this threshold level of price dispersion. This will recognise that there will not be a one-for-one relationship between the required level of price dispersion and the level of competitive headroom required to support this price dispersion.

23. For the reasons that we explain in our response to Appendix 11, there is clear and consistent empirical evidence from a number of sources that once the level of price dispersion falls below £250, customer engagement and switching rates will begin to decline precipitously, which would significantly undermine the scope for effective competition in the industry. Therefore (without prejudging the exact level of headroom required to meet the Bill's requirements), we certainly cannot see how Ofgem can set headroom at a level that provides price dispersion of less than £250 and still satisfy the requirements of section 1(6) of the Bill.
24. Headroom to support competition should not be conflated with the profit margin required to allow suppliers to cover their cost of capital. Headroom is separate from - and should be added on top of - the profit margin that an efficient supplier would need to make to fund its activities and cover its cost of capital.
25. Indeed, were headroom not specified, the only suppliers able to price below the cap would be small suppliers which are currently exempt from contributing fully to social and environmental policies. These exemptions already create an uneven playing field for competition in the market, but a cap with no headroom will exacerbate this further, removing the ability of obligated suppliers to compete on price.

Costs headroom

26. Any additional allowance to account for errors, uncertain costs and variations in the level of efficient costs that are not accounted for elsewhere in the cap design should be a separate component of headroom, and not conflated with headroom to support competition. Accurately estimating the efficient costs that a supplier can be expected to incur is a challenging task in the context of the GB energy retail market, which is highly dynamic and characterised by a wide variety of suppliers with different strategies, service offers and cost structures.
27. The starting point for setting cost allowances should be for Ofgem to make all the necessary enquiries in the first place (as Ofgem recognises in Appendix 11). However, where uncertainty in cost allowances remain following these enquiries, we expect Ofgem to take a prudent approach to estimating the efficient level of each cost component or by building in a specific allowance over and above these cost estimates. Such uncertainty may result from limitations in the availability and quality of data or because of the difficulty of perfectly predicting developments that may affect the costs that such a supplier would incur in a fast-moving market environment.
28. We support Ofgem's suggestion to allow for any sources of uncertainty within the cap. Either way, it is important that Ofgem is transparent about the assumptions it is making and explicitly allocates any allowance to account for cost uncertainty to the specific costs about which it is uncertain. In other words, even where it faces unavoidable uncertainty, Ofgem should be rigorous and systematic in its approach to quantifying the level of this uncertainty for the purposes of setting any allowance. In this regard, it would be sensible to have separate allowances for each building block of the cap (i.e. separate allowances

for any uncertainty around wholesale costs, smart rollout costs, other operating costs, etc.).

Question 3: Do you agree with our approach for accounting for different costs, in particular additional costs of serving customers paying by standard credit?

29. We agree that it is appropriate to take into account the effect of fuel and meter type, region, and payment method on cost.
30. Our response to the questions in Appendix 12 contains a detailed discussion of the issues around payment method differentials. To summarise:
- We agree with Ofgem that a payment method differential is required to reflect the higher costs of serving standard credit customers over direct debit customers. Provision 1(6)(d) of the Bill will require the cap to be set in such a way that suppliers can recover these costs.
 - The methodology as proposed by Ofgem does not allow these costs to be recovered. This is because, in Ofgem's minded to approach, a large proportion of the additional costs are socialised based on an assumed proportion of standard credit customers that is lower than the actual proportion of many suppliers.
 - Socialising costs in this way will also lead to adverse incentives for consumers to remain on more expensive payment methods, and may also mean that customers who pay by standard credit on FTCs choose the socialised costs of the default tariff over more cost reflective FTC rates. To address this issue, Ofgem must ensure that the payment method differential is set in a cost-reflective fashion. These costs therefore need to be allocated, not socialised. Our response to Appendix 12 sets out in more detail why this is the case. We also explain why the differential Ofgem has calculated is in any event likely to be an underestimate. In particular, Ofgem's proposed use of benchmarking to judge the "efficient" differential does not make sense in this context.
 - Without prejudice to the above, if Ofgem does choose to socialise any element of the payment method differential, the socialisation will need to be carried out in such a way that the supplier with the highest proportion of standard credit customers is still able to cover the costs of these customers.
31. Clause 1(6)d of the bill requires that Ofgem has regard for the need to ensure that efficient suppliers are able to cover their costs to serve, including where factors outside the control of suppliers have led to increased costs. Ofgem's proposed methodology fails to account for a large number of such costs, which would be amenable to quantification. These are discussed further in our response to the questions in Appendix 8, and include:
- The proportion of vulnerable customers. We describe in our response to question A8.8 how an appropriate uplift can be calculated. We estimate that vulnerable customers (measured by the PSR) on direct debit have contact centre costs that are on average £ higher than non-vulnerable. The corresponding differential for standard credit

customers is £~~2~~. These uplifts are in addition to the uplift due to payment method differentials.¹

- The proportion of customers served online. Our response to question A8.8 sets out the data that Ofgem needs to use to quantify this.
- Legacy pension costs. These are exogenous costs that an efficient supplier which had inherited these costs would also need to finance.
- The costs of the smart meter rollout, discussed in our response to Appendix 10.

¹ These figures have been obtained by allocating call centre costs (including related overheads) on the basis of the number of minutes spent on the phone by our call centre agents. We have calculated a per-account figure and then doubled this to obtain an estimate of the differential for both fuels.

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Question 4: Do you agree with our proposals for how we will use cost data to update the cap?

32. As set out below, we agree in principle with some aspects of what Ofgem proposes. However, we are concerned that the present proposals lack necessary detail.
33. We agree in principle that overall cap and component values from any historic base period will need updating before first application and periodically thereafter. However, Ofgem's proposals for how baseline values would be updated remain largely descriptive and high-level at this stage, making substantive commentary impossible.
34. We agree that the historic period will depend on the final choice of methodology, which is still to be confirmed. We note the historic period for Option 2 (PPM) is 2015 whereas Ofgem indicates that the historic period for Option 3 (new competitive benchmark) or Option 4 (bottom up) would likely be 2017. Either way, some if not all historic component values will need updating for a cap to commence on 1 January 2019.
35. We agree that Ofgem will need to deconstruct headline prices into separate components in any historic period to apply updates appropriately because different components are subject to different underlying drivers. Accurately estimating underlying cost components remains subject to substantial challenges under Option 2 and that practical difficulty may be compounded under Option 3. We have previously (in our responses to Working Paper 5, and the December consultation on providing financial protection to more vulnerable customers) highlighted the methodological shortcomings associated with Option 2. The appropriate approach to forward indexation may depend on how such shortcomings are resolved in the event that Option 2 is pursued.
36. In principle, the task of identifying and calibrating cost components should be more straightforward under Option 4 (bottom up) because that is inherent in the methodology itself. However, Ofgem still needs to set out how it has derived/will derive component values (and what those resulting component values are) for the historic period, how it will update those values to set the initial level of the cap, how it will update the cap periodically, and keep design assumptions under review.
37. In general, we see merit in using exogenous indices to update baseline values over the lifetime of the cap, provided that the baseline values are well founded and the indices used to update them reflect component level cost drivers appropriately. In practice, this will require different indices for different underlying components – notably in relation to smart and wholesale costs (as set out in our response to Appendices 6 and 10).

Question 5: Do you agree with our assessments of whether an exemption for tariffs that appear to support renewable energy is necessary and workable?

38. We agree with Ofgem's starting point that there should be no exemptions unless there is sufficient evidence to suggest otherwise.

39. We agree that any exemption framework should only capture tariffs that demonstrably and materially support investment in new renewable energy beyond Government policies, and cost more than the costs allowed under the default cap.
40. Ofgem is sceptical that there are any tariffs that could meet these two criteria. We do not have evidence readily available which suggests that it is likely the criteria will be met, although this does not mean that such evidence does not exist.

Question 11: Do you have any views on what information we should use to assess the conditions for competition?

41. The Bill requires that extension of the tariff cap depends on an assessment being made regarding whether conditions are in place for effective competition. We therefore agree that the use of the term “conditions” in the Bill implies that this must be the focus of the assessment.
42. We understand that Ofgem is at an early stage in its thinking at the moment, and therefore the consultation document lacks detail about how Ofgem will determine this in practice. However, we do have concerns that, at a number of points in the consultation document, Ofgem appears overly willing to accept a reduction in competition (e.g. in three of the four headroom scenarios it considers²). We do not believe this is appropriate – and indeed, we suggest Ofgem should instead be focused on ensuring that any damage to competition from the introduction of the price cap is minimised.
43. We agree that Ofgem’s priority at the moment should be on setting the cap. However, we would expect Ofgem to set out a clear framework for how it will assess whether conditions are in place for effective competition and undertake a full consultation on this proposed framework. This must allow the achievement of these conditions to be measured objectively, and give all stakeholders clarity of what Ofgem considers will need to be in place before the cap can be removed.
44. In determining these conditions, we would suggest these should meet a number of important principles:
 - The conditions must be **realistic**: they must be (i) achievable within the initial timeframe set for the cap (i.e. by the end of 2020) and (ii) take account of any effect that the cap may have on customer engagement in the market while it is in force.
 - The conditions must be **targeted** and **proportionate**: in other words, they must directly address the specific factors that – in Ofgem’s view – are preventing effective competition, and not set requirements over and above these specific factors.
 - Ofgem must recognise that many of the conditions for effective competition are already in place and do not need to be addressed or set as formal pre-conditions for the removal of any price cap. For example, the large number of suppliers in the market and the recent success that smaller suppliers have enjoyed in growing their market share shows that there are no material structural barriers to entry or expansion in the market.
 - Focusing on ensuring that customers have the ability to access, assess and act on the information that is available to them would also be too broad and ill-

² Annex 11, pp22-28

defined to be set as a formal condition for the removal of the tariff cap. Instead, Ofgem should identify what specific elements of the ability of less engaged customers to access, assess and act on information would need to be improved before competition was deemed effective, and the ways in which these specific elements could realistically be improved within the timeframe set for the cap.

- If the conditions require particular policy interventions to be undertaken, each intervention must be (a) **individually justified** by reference to an impact assessment that shows net benefits to consumers and (b) **financeable** under the price cap that is in place.
45. Further, when Ofgem considers the state of competition, as distinct from the conditions for competition, we urge it to develop a more sophisticated measure of engagement than whether or not a customer has chosen a fixed term tariff.

Appendix 1: Market basket

Question A1.1: Do you agree that we should not further consider the use of a market basket to set the initial level of the cap? We set out our reasoning in Chapter 3.

46. Yes, we agree that Ofgem should not consider the market basket further for reasons detailed in our previous response to Ofgem's Working Paper 2 (WP2).

Question A1.2: Do you agree that we should not further consider the use of a market basket to update the cap over time? We set out our reasoning in Chapter 4.

47. Yes, as above, we agree that Ofgem should not consider the market basket further in relation to initial level or updates, as set out in our previous response to Ofgem's WP2.

Appendix 2: Adjusted version of the existing safeguard tariff

48. Familiarity (“previous experience and understanding”) is no reason to use the existing PPM cap for the default cap. Ofgem’s responsibility is to define a methodology which best meets the requirements of the Bill. Convenience is at best a second order consideration. There are, in any event, many known errors in the existing safeguard tariff that will need to be corrected.
49. We are therefore pleased that Ofgem recognises that changes also need to be made to the existing PPM cap, were this methodology to be adopted. These changes should be made transparently and be subject to proper consultation.
50. In addition to those that Ofgem says it will consider, the changes should also include an adjustment to the methodology that the CMA used to estimate and update wholesale costs over time. This is necessary, justified and capable of implementation and we set out how this can be done within Ofgem’s timetable in our response to Appendix 6. Further, Ofgem is also not proposing to make any changes to the CMA’s view of the competitive profit margin. Our response to Appendix 9 explains why this is not a reasonable approach. We also assume that headroom will be adjusted, in light of our comments relating to Appendix 11.

Question A2.1: Do you agree with, or have views on, our approach to adjusting the CMA’s methodology to make its benchmark appropriate for the default tariff cap? In particular, how we propose to address: additional standard credit costs, existing overheads and customer acquisition adjustments, and other potential adjustments to operating costs

51. If properly implemented, the changes to the PPM tariff cap methodology that Ofgem has put forward for consideration in the consultation paper – relating to payment method cost differentials, overhead costs, customer acquisition costs, and operating costs – all have the potential to improve the methodology by ensuring that it better reflects the costs and risks that efficient suppliers face.
52. However, these are not the only concerns with the existing PPM methodology that need to be addressed. In particular, Ofgem is not proposing to make any changes to the methodology that the CMA used to estimate and update wholesale costs over time, even though this approach significantly understates wholesale costs that any supplier could expect to achieve, irrespective of their chosen hedging strategy. We set out our concerns further in our response to Appendix 6 (on wholesale costs). Ofgem is also not proposing to make any changes to the CMA’s view of the competitive profit margin. Our response to Appendix 9 explains why this is not a reasonable approach.
53. The CMA’s methodology must be adjusted to address these issues as well, in order for it to be appropriate for the purposes of setting the default tariff cap. Notwithstanding this, we provide comments on the specific changes on which Ofgem is consulting below.
54. With regard to payment method cost differentials, we agree that the cap should include an uplift for standard credit customers. However, careful work will be needed to ensure that this uplift is set a level that appropriately reflects the different costs and risks that

suppliers face in serving direct debit and standard credit customers. We set out our views about payment method cost differentials in response to the questions in Appendix 12.

55. With regard to overhead costs:

- We agree with Ofgem's proposal to test whether the CMA's assumptions about the development of the overhead costs of the two benchmark firms (Ovo and First Utility) have been borne out in reality. The changes that the CMA made to this element of the methodology – very late in the Energy Market Investigation process – appeared to tighten the level of the tariff cap significantly but were also highly opaque, making them impossible to assess or evaluate. This was particularly concerning given the impact they had on the cap.
- However, while the consultation document outlines some high-level principles and proposed next steps to address these deficiencies, Ofgem should already be at the point where it has undertaken the analysis and is consulting on the results. Without the opportunity for scrutiny there can be no confidence that the baseline is sound. Given the potential importance of these adjustments to the methodology, it is essential that Ofgem is fully transparent and makes its findings available to suppliers (or suppliers' external advisors) to review. To the extent that there are confidentiality issues these can readily be addressed by means of a data room.
- Given the difficulty of benchmarking overhead costs due to the significant differences in customer mix and service provided, Ofgem should conduct a bottom-up assessment of these costs.

56. With regard to customer acquisition costs, it is not possible to comment on whether the conclusion that no change to the current adjustment is warranted is correct, given the lack of information provided about this, first by the CMA and now by Ofgem. If Oxera's concerns³ are not supported by an analysis of the evidence then it is necessary to enable stakeholders to assess this claim by being able to access the evidence on which it is based. A data room would allow interrogation of the evidence from supplier data in the round.

57. We welcome Ofgem's decision to adjust the existing safeguard tariff methodology for potential variations in smart costs in principle. However, careful work will be needed to ensure that these costs are modelled appropriately using reliable data. In this respect, we note that our understanding from the CMA report is that only First Utility's smart meter costs are included within the benchmark.⁴

58. With regard to other operating costs, we disagree with Ofgem's current thinking that it is not minded to make any adjustments for cost differences that have nothing to do with efficiency for the purposes of updating the PPM tariff cap methodology. Ofgem's concerns here appear to be twofold:

³ Oxera (2017), CMA Energy Market Investigation – critique of CMA consumer detriment analysis

⁴ See "Indexation of smart meter costs – a methodology for updating the PPM cap", Frontier Economics (2018) submitted to Ofgem on 23 February 2018.

- that this will “erode the advantage” that comes with the “previous experience and understanding” of the existing methodology; and
 - that there may be practical constraints on its ability to make adjustments to the existing PPM tariff cap methodology due to limitations on the availability of relevant data for the 2015 date at which the tariff cap was initially calibrated.
59. Neither of these considerations amounts to a valid reason for ignoring necessary adjustments to operating costs:
- It is fundamentally wrong to stick to a methodology on the basis that the industry has “experience and understanding” of it if this experience has demonstrated that it is not fit for purpose. Ofgem needs only to have regard to the duties in the Bill; there is nothing in the Bill which suggests that “experience and understanding” is a consideration either within or to be ranked alongside the statutory requirements.
 - To the extent that data for 2015 does not exist, the methodology should be recalibrated for a more recent date for which adequate information is available.
60. Our observations regarding the level of headroom to add to the cap are described in our response to Appendix 11.

Question A2.2: Do you agree with how we propose to adjust the benchmark at nil consumption?

61. We agree that the existing PPM tariff cap methodology’s approach to setting the standing charge at nil consumption should be updated in principle, given that it makes no sense to base a cap on default tariffs on a separate set of PPM tariffs that will not be covered by the cap.
62. We agree that basing the level of the tariff cap on the average observed standing charges of the six large energy firms would be a simple approach that makes sense in principle. However, it is important that Ofgem applies a consistent approach for the purposes of calculating the tariff cap for both nil consumption and TDCV. Assuming that there is scope for efficiency savings at TDCV, but not at nil consumption, could distort the slope of the tariff cap schedule without good reason.

Question A2.3: Do you agree with our proposed approach for updating the level of the adjusted safeguard tariff cap?

63. We welcome Ofgem’s indication that it is minded to make changes to the existing methodology for updating costs over time, particularly relating to the way that smart costs will be indexed (see our answers to Appendix 10). We also welcome Ofgem’s approach to dealing with the proposed changes to ECO and the fact that they will also apply to this option (see our answers to Appendix 7).
64. However, we have previously set out a number of concerns about the existing PPM tariff cap’s methodology for updating the level of the tariff cap over time in respect of wholesale costs and we discuss these again in our answers to Appendix 6. Given these concerns, Ofgem should make the necessary adjustments to address them.

65. There may be a case for reconsidering the weightings used by the CMA to weight the different cost components. If this was undertaken, the resulting weightings should better reflect those of the generic suppliers, rather than those of First Utility and Ovo. This is more likely to be achieved through the first option that Ofgem presents.

Appendix 3: Updated competitive reference price

66. While this methodology could theoretically be used to set a cap that allows for legitimate differences in costs, we do not believe that the updated reference price can realistically be achieved in Ofgem's self-imposed timescales. This is given its current stage of development and the multiple adjustments that Ofgem will need to apply to make it fit for purpose (all of which would need to be subject to consultation).
67. If Ofgem does proceed with this approach then the following is a **non-exhaustive** list of changes that absolutely must be made to the current proposal:
- Adjustments are not "optional" they are fundamental. This methodology is likely to rely on tariffs from companies that are not representative of the customer bases of large suppliers which have been operating in the market since liberalisation. Ofgem's threshold for determining whether cost differences are sufficiently material to warrant adjustment must be conservative, given the requirements of the Bill relating to financeability. This is also consistent with the CMA's position in its determination of the RIIO-ED1 price control appeal, where the CMA found that a change would not be material if it had a "insignificant or negligible impact on the overall level of the price control".⁵ As set out in our response to Appendix 8, there is a real risk that – if Ofgem does not recognise the efficiently incurred costs of large suppliers like Centrica – customer service standards would be compromised, leading to significant customer detriment.
 - As well as the costs that Ofgem mentions it will look at, it must also account for differences in wholesale costs if this option is to be pursued. While Ofgem appears to acknowledge this concern, it notes that "if developing a standardised approach to wholesale costs was considered important, then we might want to select a bottom-up approach instead."⁶ This view is unacceptable as it implies that accuracy can only be achieved within the bottom-up methodology. If this were to be the case, then it would render all options except the bottom-up methodology untenable.
 - Given their importance and the risk of error, all adjustments must be transparent and be available for scrutiny in a data room.
 - There is no justification for Ofgem to only look at the tariffs of a subset of suppliers that meet its criteria when setting the benchmark (which include a high benchmark for "engagement"). All suppliers that meet the criteria must be included.

Question A3.1 Do you agree with our proposed approach for an updated price reference approach? In particular, how we select price data and exclude suppliers or adjust data.

Price data

68. We understand that Ofgem proposes to use 2017 tariff data gathered from the responses to the RFI it recently issued for the purposes of this analysis.

⁵ British Gas v Ofgem: RIIO-ED1 Appeal (2015) Final Determination para 3.60.

⁶ Ofgem (2018) para 3.22 of Appendix 3.

69. We agree that Ofgem should focus on direct debit tariff data and tariffs associated with the supply to standard meter types.
70. Ofgem should also exclude smart meter specific tariffs from the benchmark price data as they may be promotional in nature (reflecting suppliers' rollout obligations) rather than reflecting the costs that suppliers actually incur in serving such customers. Including such tariffs in the benchmark could paint a distorted picture of the costs that suppliers efficiently incur, particularly if other suppliers are choosing to fulfil their smart meter rollout obligations in other ways.

Supplier exclusions from the benchmark

71. We agree that certain suppliers should be excluded from the benchmark where it is likely they will not provide an appropriate comparator and/or adjustments cannot be made to put them on a comparable basis. On this basis we would agree that suppliers that satisfy any of the following criteria should be excluded:
- Suppliers with niche business models – such as those geared to specific customer groups or to customers of specific tariff types – should be excluded from the benchmark. This is particularly important for business models designed to appeal to customers who will not be covered by the default tariff cap (e.g. suppliers who focus on PPM customers).
 - Suppliers with provisional orders against them should be excluded from the benchmark where they may only have been able to achieve low costs – and therefore low tariffs – by not delivering their service obligations. Specifically, we believe that any suppliers with provisional orders against them relating to compliance failings in 2017 (the period that we understand Ofgem would be minded to use to calibrate the initial level of the cap) should be excluded on these grounds. We agree that Ofgem should not exclude:
 - suppliers who are currently under investigation for possible compliance failings, but where Ofgem has not yet made a ruling; and
 - suppliers who were investigated for compliance failings but where the investigation was closed without issuing a provisional order.
 - Suppliers who are unable to provide reliable data should also be excluded from the benchmark. This should apply to suppliers that are unable to reliably provide the information on their costs and margins that Ofgem requires in order to make any adjustments to the supplier's tariffs to ensure that they provide an appropriate benchmark.
72. In addition, we believe that Ofgem should exclude:
- Any suppliers who have ceased trading; or
 - Any suppliers who have been trading for less than a year (given uncertainty over whether such suppliers have a viable long-term business model). Note that we believe this to be a highly conservative approach, since by no means all suppliers with unsustainable business models will fail within their first year of operation. For example, both Flow Energy and GB Energy had been trading for longer than this before they failed.
73. There is also a strong case for excluding suppliers that have not been operating at sufficient scale for a reasonable period of time.

- This is to avoid including any suppliers whose prices may not be sustainable and whose customer service arrangements are not proven at scale.
 - We would suggest that only suppliers that have been operating with proven customer service credentials at reasonable scale for over one year are included. We would suggest that “reasonable scale” should start at the 250,000 customer account obligation threshold. More generally, as indicated in our response to WP4, it is crucial that the price cap methodology recognises the artificial competitive distortion created by small supplier exemptions, and we urge Ofgem to press the Government to remove these distortions at the earliest opportunity.
74. Ofgem also proposes to exclude suppliers who do not meet certain “customer engagement” criteria. We set out our views on these suggested criteria in our response to Question A3.2 below.

Adjustments

75. Ofgem intends to adjust tariffs of benchmark companies to reflect WHD and ECO costs that small suppliers do not face. We agree that this is a necessary adjustment to make.
76. However, Ofgem states that it is not minded to adjust the level of the cap for wholesale costs. We strongly disagree with this position and refer to our answers in Appendix 6 and to Judgement 3 below.
77. In addition to this, Ofgem should make adjustments for:
- Smart costs (as set out in our answers to Appendix 10);
 - Differentials in costs for vulnerable customers (as set out in our answers to Appendix 8); and
 - Cost differentials for online customers (as set out in our answers to Appendix 8).

Question A3.2 Do you agree with the judgements we set out regarding consumer engagement, policy and wholesale costs, and constructing the benchmark?

Judgement 1, customer engagement

78. Ofgem proposes only to include suppliers in the benchmark if they have a high proportion of “engaged customers” defined as those with a high proportion of customers on fixed term tariffs and with a low proportion of customers on SVTs for three or more years. This is a very narrow measure of engagement, which implicitly assumes that switching to a fixed term deal is a necessary prerequisite for a customer to have demonstrated engagement.
79. We urge Ofgem to develop a more sophisticated measure of engagement, rather than whether or not a customer has chosen a fixed term tariff. We also consider that the thresholds that have been applied are inappropriately conservative.
80. Ofgem recognises that in practice customers can engage in other ways, but argues that – because it is looking at which tariff data to include in the benchmark – it considers that customers’ engagement when selecting a tariff is the “most reasonable proxy” for engagement, rather than “looking at other activity on a customer’s account”. We do not agree that this provides a sound justification for using such a narrow metric.

81. As long as a customer has demonstrated that they are actively engaging in the market – whether by switching tariff or by another means – the customer is likely to respond to price and quality signals and thereby apply competitive pressure on suppliers in exactly the way that one would expect in a competitive market. In this regard, we would note that we have recently undertaken an extensive programme of engagement with those of our customers on default tariffs; where customers have been prompted, it is their choice as to how to respond. A simplistic focus on tariff choice risks ignoring broader evidence of engagement by customers.

Judgement 2, adjustment for policy costs

82. We agree with Ofgem’s proposal to adjust for policy costs of ECO and WHD to those of a fully obligated supplier with flat customer numbers.

Judgement 3 adjustment for wholesale costs

83. Ofgem proposes to make no adjustment to wholesale costs on the basis that it has “not identified a compelling reason” for making such an adjustment.
84. We strongly disagree with this judgement. As we have explained in previous submissions, if Ofgem does not adjust for wholesale costs and then updates using a hedging assumption that is different to that used by the benchmark suppliers, it is likely to create a wholesale cost allowance that is below that which is achievable by an efficient company, irrespective of the hedging strategy it chooses. Any such distortion could be highly material given that wholesale energy constitutes the single largest cost component of domestic energy bills. We discuss this further in our answers to Appendix 6.
85. Ofgem appears to acknowledge this concern in paragraph 3.22 of Appendix 3, but notes that “if developing a standardised approach to wholesale costs was considered important, then we might want to select a bottom-up approach instead.” Such a view is unacceptable as it essentially implies that accuracy can only be achieved within the bottom-up methodology. Ofgem also suggests that “it would be challenging to carry out” any such adjustment in practice within the context of the updated competitive reference price approach to setting the cap.
- We recognise that extracting the forecast wholesale costs that informed the benchmark suppliers’ actual pricing decisions and replacing them with modelled wholesale costs would be a challenging exercise and we agree that one of the key advantages of a bottom-up methodology would be that it would circumvent a number of these challenges.
 - However, if Ofgem were to select an updated competitive reference price methodology (rather than a bottom-up methodology) for the purposes of setting the cap, it would be unacceptable not to make the necessary changes to wholesale costs to address this issue, given the extent to which it could distort the level of the price cap. We discuss this further in our answers to Appendix 6.

Judgement 4, number of suppliers selected in the final benchmark

86. Ofgem states that it is minded to include at least two suppliers in the benchmark, and at most half of the remaining suppliers (after exclusions). We disagree with this minded-to position. Ofgem should include all suppliers that meet the criteria it has used to set the benchmark. This is because:

- Ofgem is already proposing to apply a number of strict criteria that will not only exclude suppliers whose costs are not comparable, but also exclude suppliers who have what Ofgem regards to be a largely “disengaged” customer base.
- The remaining list of suppliers will – by Ofgem’s own thinking – have a highly-engaged customer base and will be strongly incentivised to set prices at a competitive level to retain these customers. We therefore strongly disagree with Ofgem’s suggestion that if it included all suppliers remaining after the exclusions, it could end up “setting the benchmark a long way from the efficiency frontier”.
- Any further exclusions or restrictions that Ofgem applies to the list of benchmarks over and above this will be not only unnecessary, but also arbitrary and based on Ofgem’s own qualitative judgment rather than transparent and objective evidence.

Judgement 5, weighting of suppliers within the benchmark

87. Ofgem is minded to use a simple average. However, this assumes that as much reliance can be placed on the information from one benchmark supplier’s tariffs and on those of any other supplier. For this to be the case:
- The information provided by the different suppliers would need to be of a similar level of quality and reliability;
 - Ofgem would need to have full confidence that the business models of each of the benchmark suppliers were equally sustainable.
88. To the extent that this is not the case, there would be a clear reason to place more weight on the tariffs of some benchmark suppliers than others.

Question A3.3 Do you agree that, under an updated competitive reference price approach, we should set the benchmark at nil consumption using the adjusted standing charges from the same suppliers included in the benchmark at typical consumption?

89. Both the level of the benchmark at TDCV and the level of the benchmark at nil consumption should be set on a consistent basis – i.e. with reference to the same benchmark suppliers and the same assumed standing charges. Failure to do this would result in an internally inconsistent and incoherent tariff cap schedule. Even if the level of the tariff cap accurately reflected the costs and risks that an efficient supplier would face in supplying a customer at the TDCV level in such a scenario, it would fail to do so at every other consumption level.
90. If Ofgem does use the standing charges, they should be adjusted to reflect WHD costs that are missing from non-obligated suppliers – in just the same way as level of the cap at TDCV should be adjusted.

Question A3.4 Do you agree with our approach to weighting the benchmark at TDCV and nil consumption?

91. Ofgem proposes to weight the benchmark at TDCV by calculating a bottom up wholesale cost and a bottom-up policy cost. These would be subtracted from the updated competitive reference price and the residual treated as an estimate for operating costs and the normal rate of return. We do not agree with this approach. Using a bottom-up

wholesale cost estimate based on a hedging strategy that none of the benchmark companies were likely to be following is inappropriate and will give rise to inappropriate weights.

92. Ofgem also proposes to assume that none of the price cap at nil consumption is composed of policy costs. Since Ofgem already identifies the WHD as a policy cost that applies at nil consumption elsewhere, it seems both simple and sensible to recognise this as a cost at zero consumption.

Appendix 4: Bottom-up cost assessment

93. We agree with Ofgem that a well-designed bottom-up approach to estimating an efficient level of costs would have a number of advantages.
94. The relevant part of the Consultation Paper, however, covers very little about how it will be set in practice. Given that the details of the approach sit within other Appendices, our answers to those Appendices should be taken into account alongside this one.

Question A4.1 Do you agree with our assessment of the advantages and disadvantages of a bottom-up approach to estimating an efficient level of costs?

95. We agree with Ofgem that a bottom-up approach to estimating an efficient level of costs would have a number of advantages. As Ofgem recognises, a well-designed bottom-up methodology will:
- provide confidence as to which costs are included in the benchmark;
 - provide confidence as to how each element of costs is treated under the cap; and
 - ensure that a valid comparator is constructed.
96. We recognise that a full bottom-up analysis of suppliers' efficiently incurred costs is not a straightforward exercise, and that the challenges that Ofgem has listed in its consultation are real.
97. However, these are unavoidable challenges that Ofgem will need to address for any well-designed price cap methodology, including all of the methodological options that Ofgem has indicated that it is minded to consider further. In this sense, we do not agree with Ofgem's characterisation of these challenges as "disadvantages" associated with the bottom-up approach.
98. On the contrary, the greater transparency associated with a bottom-up approach will arguably enable Ofgem and industry stakeholders to identify and work through these difficulties more effectively than would be the case with a "top-down" approach based on benchmark suppliers.
99. For example, Ofgem states that one of the challenges associated with the bottom-up methodology, is that it will have to form a single view on the efficient level of costs, in a market with over 60 suppliers, each with different histories and business models. However, it will need to do this for a top-down methodology as well in order to identify the appropriate benchmark firms, and the exclusions and adjustments that need to be made to these benchmark firms' costs in order to ensure that they are comparable. Indeed, the fact that the bottom up methodology makes this view more transparent is an advantage as it more easily allows Ofgem to ensure it is meeting the requirements of the Bill, including the requirement that suppliers can cover their efficiently incurred costs and thereby finance their activities.
100. Ofgem also highlights the risk of double counting or excluding costs under a bottom-up approach. However, if Ofgem follows a transparent consultation process then

stakeholders can support Ofgem in providing the critical review to ensure that costs are not accidentally excluded or double counted.

Question A4.2 Do you agree with our proposed approach to categorising different costs under a bottom-up cost assessment approach to setting the default tariff cap?

101. The table below summarises our understanding of the different cost categories and sub-categories that Ofgem is proposing that it would use for the purposes of a bottom-up tariff cap methodology.

Table 1. Bottom up tariff cap expenditure categories

Category	Summary of main expenditures
Wholesale costs	<ul style="list-style-type: none"> • The direct cost of gas and electricity contracts for delivery in the price cap period • Imbalance charges, trading and transaction fees • Capacity market (CM) payments
Network costs	<ul style="list-style-type: none"> • All gas and electricity transmission and distribution charges • Balancing services use of system (BSUoS) charges
Environmental and social obligations (policy) costs	<ul style="list-style-type: none"> • The costs associated with schemes to support renewable and low carbon electricity generation (Renewable Obligation (RO), Contracts for Difference (CfD), Feed in Tariffs (FiT)) • The costs associated with the Energy Company Obligation (ECO), supporting energy efficiency • The costs of providing support to fuel poor customers under the Warm Home Discount (WHD) scheme • The costs of providing assistance for areas with high electricity distribution costs (AAHEDC)
Operating costs	<p>Companies' internal operating costs, including:</p> <ul style="list-style-type: none"> • metering (including smart metering) • sales and marketing (including third party commissions paid to price comparison websites or brokers) • billing and bad debt • customer service • central overheads (including IT) • Data Communications Company (DCC) charges, charges to fund Elexon and Xoserve, and any other obligatory industry charges that specifically relate to supply • depreciation and amortisation charges associated with previous capital expenditure

Category	Summary of main expenditures
Standard credit cost uplift	<ul style="list-style-type: none"> An uplift (for standard credit customers only) reflecting the additional costs of supplying this payment type
Cost of capital (Profit margin)	<ul style="list-style-type: none"> A profit margin reflecting a normal return on capital

102. We agree with the broad categories that Ofgem has suggested, as outlined above. However, we have specific comments on the constituents of some these categories, which we summarise below.

Wholesale costs

103. This must include the full costs of delivering against the price cap – including the cost of the difference in basis between the structure of the index and the delivery period for each price cap.
104. In addition to the cost sub-categories listed in the table above, a specific separate allowance must also be made for shaping costs.
105. We agree that it is important to include a specific allowance for capacity market costs. There is a question as to whether these should be thought of as wholesale costs or policy costs. In the current guidance for the preparation of consolidated segmental statements Ofgem requires capacity market costs to be included in the “Environmental and social obligations costs” category. However, provided there is a clear and distinct allowance for these costs and they are indexed appropriately, categorisation is a cosmetic issue.
106. For more detailed commentary on our concerns regarding Ofgem’s proposed treatment of wholesale costs see our answers to Appendix 6.

Operating costs

107. Ofgem categorises smart meter costs within operating costs. Whilst some of the costs of smart meters are of an operational nature we believe it would be more appropriate to categorise smart meter costs separately from operating costs. This would then allow Ofgem to appropriately consider smart meter costs and other operational costs separately.
108. In this respect, we note Ofgem’s approach to calculating net smart metering costs already separately estimates them for 2017, even if Ofgem is choosing not to report them. It then proposes to add (or subtract) an increment in each year to reflect changes from this baseline. Given this approach, it is absolutely crucial that the methodologies Ofgem uses to estimate smart costs and efficient operating costs are aligned and consistent.
109. For more detailed commentary on our views and concerns regarding Ofgem’s treatment of smart meter costs, and in particular the importance of alignment and consistency between the methodologies used to determine smart meter costs and other operational costs, see our answers to Appendix 10.

Standard credit cost uplift

110. We agree with Ofgem's proposal to include a separate payment method cost uplift category to incorporate the incremental cost of serving customers who chose to pay by standard credit as opposed to direct debit.
111. This should capture the full set of the additional costs of serving standard credit customers. For more detailed commentary on Ofgem's proposed treatment of payment method uplifts see our answers to Appendix 12.

Cost of capital (Profit margin)

112. We agree with Ofgem's proposal to add a profit margin on top of the costs listed in the table above, so as to allow suppliers to cover their cost of capital. We do, however, have significant concerns about the level of EBIT margin that Ofgem is proposing to permit for this purpose (see our answers to Appendix 9).
113. For the avoidance of doubt, profit margin should not be conflated or confused with the additional headroom allowance that Ofgem must add over and above this in order to support effective competition, as required by the draft Bill.
114. As we have explained in previous submissions, a price cap that simply allowed suppliers to cover their costs and to make a large enough EBIT margin to cover their cost of capital would leave no room for competition. It is essential that an explicit and separate headroom allowance is added on top of this, given the price cap is being introduced into a market in which there is established competition between suppliers. The question of the EBIT margin that suppliers need to make to cover their cost of capital is entirely separate from the question of how much headroom for competition should be added on top of this. These must be separate allowances that are in no way interdependent (see our answers to Appendix 11).

Appendix 5: Updating the cap over time

115. We broadly agree that the approach to updating the cap over time should be based on exogenous cost indices, identified in advance of the cap being introduced. Our preference is for any uncertainty in allowances to be reflected in the setting of the components of the cap (either in specific allowed cost, or in the “cost” element of headroom). However, we accept that under certain (potentially extreme) scenarios, provision should be made for re-opening of the cap.
116. However, this view depends very much on Ofgem getting the initial design of the cap broadly correct (on which we reserve all our rights at this stage given the present high degree of uncertainty).
117. Note that this section does not cover specific concerns raised in relation to updating for smart meter costs and wholesale costs, which are dealt with in Appendices 10 and 6 respectively.

Question A5.1: Do you agree with our proposal to update the cap in line with trends in exogenous cost drivers?

118. We agree that the approach to updating the cap over time should be based on exogenous cost indices (at cap component level), identified in advance of the cap being introduced. This is a preferable approach to general periodic “reopeners” that risk creating unnecessary uncertainty over the level at which the cap will be set.
119. We are concerned, however, that Ofgem’s descriptive and high-level approach presented in the consultation does not contain the detail and quantification we would expect at this late stage in Ofgem’s process (especially given the little provision for further substantive consultation).
120. As discussed more fully in response to Q4 of the main consultation document, much more detail on the derivation and calibration of initial cap components is needed before the appropriate approach to updates in each case can be established.

Question A5.2: Do you agree with our proposed choice of cap and baseline periods?

121. Not entirely. There are two quite different questions here, which it is necessary to consider separately. We address these in turn below.
122. First, the choice of baseline period clearly depends on the methodology that is ultimately adopted. As discussed more fully in response to Q4 of the main consultation, much more detail is required on how to establish component costs in the baseline period, especially under reference price approaches, before the appropriate approach to periodic updates can be properly addressed. We underline the critical importance of this issue in relation to wholesale and smart costs among others.
123. Second, there is a question about the process and mechanics for periodic cap revision. We note that the Bill requires Ofgem to review the level of the cap at least every six

months, and that changes in underlying wholesale costs alone are likely to necessitate actual revisions with this frequency. We broadly support the proposal to synchronise the cycle for revision with April/October PPM changes, confirmed in February and August respectively.

124. However, we would ask that Ofgem considers confirming the exact changes in the price cap sooner than is the case with the current PPM cap. Even notification of price changes a week earlier than is currently the case would help relieve the major logistical challenges that need to be overcome before a price change is implemented (or notification of changes by close on the first working day of Feb/Aug for changes in April/October). We would also encourage Ofgem to provide provisional price confirmation, as soon as all other components (commodity elements aside) are known.

Question A5.3: Do you consider that further provision is required for us to re-open aspects of the design of the cap, beyond our licence modification powers – and if so, why?

125. We consider that allowance must be made for the possible need to re-open aspects of cap design during its life. However, such changes – or equally decisions not to make such changes – must be subject to transparent consultation. On balance, therefore, we do not consider that Ofgem should, at this stage, seek to provide for speculative changes that could, if necessary and appropriate, be pursued via licence modification.
126. We would stress, however, that this view depends very much on Ofgem getting the initial design of the cap broadly correct (on which we reserve our rights at this stage given the present high degree of uncertainty).
127. However, if over time policy costs (e.g. resulting from ECO3) 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.

Appendix 6: Wholesale costs

128. Before answering Ofgem's specific questions, we reiterate the key points from our covering letter concerning wholesale costs.

- The commodity index that is used to set and update the cap should be replicable by suppliers. Ofgem is currently proposing that the observation period for the initial period of the cap (December '18 – March '19) occurred in the past (from April 2018). Applying retrospective assumptions in price controls may be unlawful and is certainly undesirable. However, without prejudice to Centrica's strongly held legal view and reserving our rights on this matter, if Ofgem felt unable to avoid retrospection after performing an appropriately rigorous legal analysis of the various options, the least damaging position Ofgem could adopt would be to (a) minimise the extent to which the decision is retrospective, and to (b) maximise the opportunity for suppliers to replicate the assumed hedging strategy. To achieve this, Ofgem could use a three-month observation period to set the initial cap (e.g. July to September or mid-July to mid-October), providing the 'smoothing' required while allowing suppliers to replicate it. Although suppliers would have to buy a significant amount of commodity over this period, it is possible given current market liquidity. We, as the owner of the largest supply business, believe that we can buy sufficient commodity, so other suppliers should be able to do the same.
- We disagree with Ofgem's assumption that the wholesale provision in the PPM price cap methodology captures all relevant wholesale costs, and consequent proposal not to adjust it. The PPM methodology would understate wholesale costs for the default cap for a number of reasons, including the fact that the market has changed since 2015 and the scope of the default cap is broader.
- In the table below, we list how the PPM price cap would understate wholesale costs if used for the default cap, and how to address these issues. There is currently £38 of overall shaping cost included in the PPM cap (indexed to the commodity allowance – it was £44 in summer 2015⁷ but the decrease in market prices has now reduced it to £38). This shaping cost was sufficient to cover the extra wholesale costs for PPM customers in 2015, but is insufficient now. If the bottom-up methodology were to be used, the full costs in the second column would need to be accommodated because there would be no existing cost allowance to potentially offset them against.
- There is a risk that the mismatch between the index used to set cap and update the cap is mismatched against the actual hedging costs of the benchmark tariffs. This could introduce a variance of +/- £30/DF. Ofgem should ensure that it uses the same commodity index to set the cap that it uses to update the cap. Failing this it will need to apply an uplift to account for the potential mismatch.
- In this appendix response, we fully explain what these costs are and how they are calculated, using external source data where possible. We consider our response to prove that they exist, and exist to the extent that we demonstrate.

⁷ Calculated based on current Ofgem average TDCV, using price data from Table 14.7 of the CMA Energy market investigation final report

Table 2. Issues with the PPM tariff cap wholesale methodology

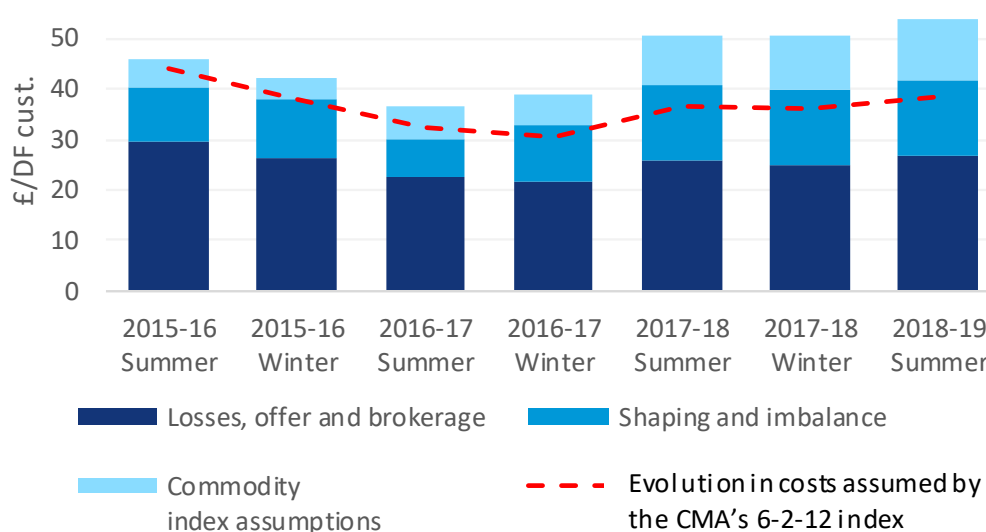
Cost/issue	Shortfall per dual fuel customer in PPM cap, before shaping costs allowance of £38 ⁸	Solution
Understatement due to curve backwardation	Around £8	Best option is to factor in the structure of the forward curve when calculating each cap. Ofgem could adjust the index construction so that the mismatch cancels out across a year (by adjusting the Winter cap up or down so that the amount under recovered in Winter matches the amount over recovered in the previous Summer). Alternatively, apply an uplift.
Underweight of demand in winter compared to summer	£6	Best option is to correct assumed level of demand across the seasons, using Xoserve gas profiles and Elexon power settlement profiles. Alternatively apply an uplift.
Incorrect split between baseload and peakload	£3-£6 (electricity only)	Apply an uplift or adjust the ratio to 50-50
Does not cover variances within seasons	£4	Apply an uplift
No allowance for within-month shaping for gas	£7	Apply an uplift
Imbalance	£1	Apply an uplift
Cost of trading	£0.3/customer for gas and £0.5/customer for electricity	Apply an uplift

⁸ At current Ofgem Medium TDCV

Cost/issue	Shortfall per dual fuel customer in PPM cap, before shaping costs allowance of £38 ⁸	Solution
Uplift to cover T&D losses	£11/customer for gas and £16/customer for electricity	Apply an uplift using Line Loss Factors/Transmission Loss Multipliers from Elexon and Unidentified Gas from Xoserve (ca. 10% for electricity and 5% for gas)

Question A6.1: Do you agree with our approach to setting the wholesale allowance? In particular using 2015 for the base period of the adjusted existing safeguard tariff approach.

129. No.
130. We disagree with Ofgem's proposal to not make any adjustments to the wholesale costs benchmark under the adjusted-PPM or the updated reference price approaches. Ofgem's assumption that the reference prices capture all relevant wholesale costs is incorrect for the adjusted-PPM approach, and may not be correct for the updated reference price approach.
131. The current PPM methodology includes an implicit shaping cost of £38 per typical dual fuel customer (indexed on the commodity allowance) to allow for costs that were not explicitly included in the index. The shaping cost was £44 in 2015, which was broadly sufficient to cover the extra costs when the PPM price cap was set, but it is not now.
132. Since 2015, the costs that were covered by the shaping cost allowance in the PPM cap have changed and they now substantially exceed the £38 allowance. In our response to WP5, we listed what those costs are, explained why they have changed, and estimated the magnitude of change. We said that they currently amount to an extra £56 per typical dual fuel customer, meaning that there would be a shortfall of £18 per dual fuel customer. We have updated our analysis from WP5 and included it in this response. We have also included the models and spreadsheets that show how we calculated each cost element, and data source. We consider the evidence we are submitting in this response to constitute proof that these costs exist to the extent we show. It would be unacceptable for Ofgem to continue to claim that insufficient evidence has been provided to show that adequate provision needs to be made for all of the costs in table 2 above.
133. Figure 1 below (copied from our response to WP5) shows the evolution of these costs in aggregate vs the allowance implied by the PPM cap. Detailed examples and suggestions on how these costs should be adjusted for under the adjusted-PPM or the updated reference price approaches are included in our responses to questions A6.2 to A6.6 below.

Figure 1. Additional wholesale energy costs vs PPM allowance

134. For the bottom-up approach, all of the extra costs we designate should be built into the wholesale allowance in full.
135. The commodity index that is used to update the cap should also be used to set the initial cap. This should be done by removing the commodity costs from the initial benchmark and then substituting what they would have been using the commodity index that is used to update the cap. This is an exercise that Ofgem must undertake if it were to pursue either an adjusted version of the existing safeguard tariff or an updated competitive reference price.
136. Even if Ofgem cannot straightforwardly update the benchmark suppliers' tariffs so that they perfectly reflect the prices that these benchmark suppliers would have set had they been following the exact hedging strategy used to roll forward the level of the cap over time, Ofgem could still make some straightforward adjustments that would go some way towards achieving this.
137. For example, Ofgem could:
- ask the benchmark supplier to confirm what hedging strategy they actually followed on the dates used to calibrate the initial level of the benchmark; and then
 - adjust these benchmark suppliers' tariffs to reflect the difference between these outturn costs and the outturn costs that they would have experienced had they followed the hedging strategy that tariff cap methodology assumes for the purposes of updating the level of the tariff cap over time.
138. This solution would be straightforward to implement and would at least reduce the potential size of the wholesale cost distortion. In this sense, such a solution would be clearly preferable to Ofgem's current proposal to do nothing.
139. In response to Working Paper 5 (WP5), we submitted evidence that shows that the mismatch between likely hedging strategies used to set and update the PPM cap result in a +/- £30 variance for a dual fuel customer on an annualised basis. +/- £30 is a significant degree of inaccuracy in the cap, and seriously risks suppliers not being able to finance their activities as a result of factors that are outside their control. Whilst this

quantification was in respect of the PPM cap, the same issues would apply if Ofgem adopted an updated competitive reference price.

140. In response to WP4, OVO confirmed that it does not purchase energy in the way the PPM cap assumes and instead purchases in a way to smooth costs between seasons. OVO's submission is strong evidence that the hedging strategy assumed in the PPM benchmark does not match the strategy that is used to update the cap, and supports our analysis. If Ofgem does not set the cap using the same commodity index that is used to update the cap, then additional cost allowance is needed to account for the discrepancy between the two.

Question A6.2: Do you agree with our approach to updating the wholesale allowance?

141. Questions A6.1, A6.2 and A6.3 are closely interlinked. Our views on the approach that Ofgem should take to update the wholesale allowance are captured in our responses to questions A6.1 and A6.3.

Question A6.3: Do you agree with our proposed approach to use a semi-annual cap period, compared with a 6-2-12 annual model, or shorter observation period? Please explain how the alternatives would affect you, if we were to choose those options instead.

142. No.
143. We are not supportive of the 6-2-12 annual model, or of using a shorter observation period, and have the same concerns Ofgem set out in in Appendix 6⁹ which we also described in our response to the CMA's Provisional Decision on Remedies in April 2016. To be clear, if there was a choice between the 6-2-12 annual model and the 6-2-12 semi-annual model, we would support the semi-annual model.
144. In our response to WP1, we have suggested that Ofgem adopts a rateable 18-month or 12-month hedging strategy rather than the 6-2-12 semi-annual because it provides better smoothing and promotes market liquidity. If Ofgem is not prepared to adopt an 18 or 12-month rateable strategy, then it should review the 6-2-12 semi-annual model to reflect actual commodity costs incurred by suppliers.
145. As we previously explained in our response to WP5, the 6-2-12 strategy, updated six-monthly, systematically understates wholesale costs if – as has been the case recently – the wholesale commodity curve is in a state of backwardation. Given the commodity curve shape at the time the PPM cap was set (i.e. not in a state of backwardation) and the smaller volume affected, it was possible to hedge some of this risk for a manageable cost. The current shape of the wholesale gas and power curves means that suppliers would be incurring a cost that cannot be recovered through hedging, and the substantially larger volume affected by the default tariff cap effectively precludes suppliers from being able to hedge the risk of this cost increasing further.

⁹para 5.12 and 5.13

146. In our response to WP5¹⁰, we estimated that the wholesale costs would be understated by £7 per dual fuel customer on an annual basis as a result of the mismatch between the increasing wholesale costs and backwardation of the curve. The two tables below show how we calculated this cost, based on the CMA assumptions for the PPM index and using the same source for prices (ICIS):

Table 3. Wholesale curve backwardation impact, gas

Gas	Unit	Delivery period						Total
		Q2 19	Q3 19	Q4 19	Q1 20	Q2 20	Q3 20	
a. ICIS Price assessment (11th June 18)	p/th	49.96	46.96	53.93	58.43	44.65	43.05	
b. Consumption at Ofgem TDCV (CMA assumption)	kWh	2503	1995	3504	3998			12000
c. 6-2-12 index	p/th	53.44	53.44	51.68	51.68			
d. Commodity cost (a*b)	£/cust	43	32	64	80			219
e. Commodity revenue under cap (b*c)	£/cust	46	36	62	70			214
f. Difference (e-d)	£/cust	3	4	-3	-9			-4.5

Table 4. Wholesale curve backwardation impact, electricity

Electricity	Unit	Delivery period			Total
		Sum-19	Win-19	Sum-20	
a. ICIS Price assessment - Baseload (11th June 18)	£/MWh	48.85	54.40	44.68	
b. ICIS Price assessment - Peak (11th June 18)	£/MWh	51.98	61.63	48.45	
c. Power index price (0.7*a+0.3*b)	£/MWh	49.79	56.57	45.81	
d. Consumption at Ofgem TDCV (CMA assumption)	kWh	1454	1646		3100
e. 6-2-12 index	£/MWh	53.39	51.52		
f. Commodity cost (c*d)	£/cust	72	93		166

¹⁰ See Table 1, page 27

g. Commodity revenue under cap (d*e)	£/cust	78	85	162
h. Difference (g-f)	£/cust	5	-8	-3.1

147. Therefore Ofgem should allow for the mismatch between the wholesale costs and the wholesale allowance, and the risk of it increasing further (if the backwardation of the commodity curves increases), in the construction of the cap, either:

- (The best option) by adjusting the index construction so that the mismatch cancels out across a year (by adjusting the Winter cap up or down so that the amount under recovered in Winter matches the amount over recovered in the previous Summer); or
- By building an appropriate uplift, at least equal to the difference in the above tables (because there is a risk of it increasing further);

148. The PPM tariff cap methodology also underweights the level of demand over the winter peak months relative to the summer months when wholesale energy costs are typically lower. In our response to WP5, we calculated that the mismatch in demand profiles results in the PPM cap understating true wholesale costs by £5 per gas customer and £1 per electricity customer per year. The two tables below show how we calculated this cost, based on the CMA assumptions for the PPM index and using the same source for prices (ICIS). Either the assumed level of demand across the seasons should be corrected, using Xoserve gas profiles and Elexon power settlement profiles (this would be the best option), or an uplift at least equal to the differences in the tables below should be applied.

Table 5. Demand weighting impact, gas

Gas	Unit	Delivery period						Total
		Q2 19	Q3 19	Q4 19	Q1 20	Q2 20	Q3 20	
a. ICIS Price assessment (11th June 18) (a)	p/th	49.96	46.96	53.93	58.43	44.65	43.05	
b. Consumption at Ofgem TDCV (CMA assumption)	kWh	2503	1995	3504	3998			12000
c. Consumption at Ofgem TDCV (Actual)	kWh	2063	929	3984	5024			12000
d. Commodity costs assumed in the cap (a*b)	£/cust	43	32	64	80			219
e. Actual commodity costs (a*c)	£/cust	35	15	73	100			224
f. Difference (d-e)	£/cust	8	17	-9	-20			-4.7

Table 6. Demand weighting impact, electricity

Electricity	Unit	Delivery period			Total
		Sum-19	Win-19	Sum-20	
a. ICIS Price assessment - Baseload (11th June 18)	£/MWh	48.85	54.40	44.68	
b. ICIS Price assessment - Peak (11th June 18)	£/MWh	51.98	61.63	48.45	
c. Power index price (0.7*a+0.3*b)	£/MWh	49.79	56.57	45.81	
d. Consumption at Ofgem TDCV (CMA assumption)	kWh	1454	1646		3100
e. Consumption at Ofgem TDCV (Actual)	kWh	1354	1746		3100
f. Commodity costs assumed in the cap (a*b)	£/cust	72	93		165.5
g. Actual commodity costs (a*c)	£/cust	67	99		166.2
h. Difference (f-g)	£/cust	5	-6		-0.7

Question A6.4: Do you agree with our approach to modelling forward contracts? In particular: that initial shaping should be based on a 70-30 split between baseload and peakload, and the cap will be semi-annual. If not, please provide evidence to support alternative approaches.

149. No.

150. We are pleased that Ofgem recognises it as a fact that the impact of solar generation means that initial shaping based on a 70-30 split between baseload and peakload is not appropriate. However, we disagree with Ofgem's proposal to not correct this inaccuracy.

151. Ofgem is not currently proposing to correct the assumed split between baseload and peakload because:

- “there is also a risk of over compensation as this will be set all year round”
- “It is not obvious whether a change in ratio would help... calculate a more accurate level, or what that ratio would be”.

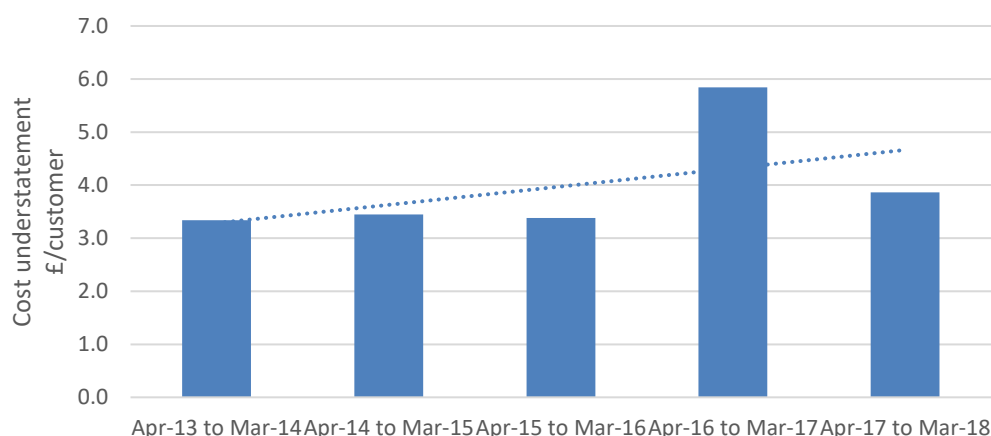
152. To change the ratio, Ofgem states that it “would require more evidence on the requirement, as well as what the level of peakload should be”. In this response we provide proof that the requirement exists and to the extent we show.

153. In our response to WP5, we said that the assumed 70-30 split in the PPM cap understates the costs of commodity for electricity customers. We calculated this cost by comparing over the past few years:

- The annual cost of commodity for a profile 1 electricity customer (using outturn APX prices and average Elexon profile 1); and
- The cost implied under the PPM cap, assuming a 70-30 split.

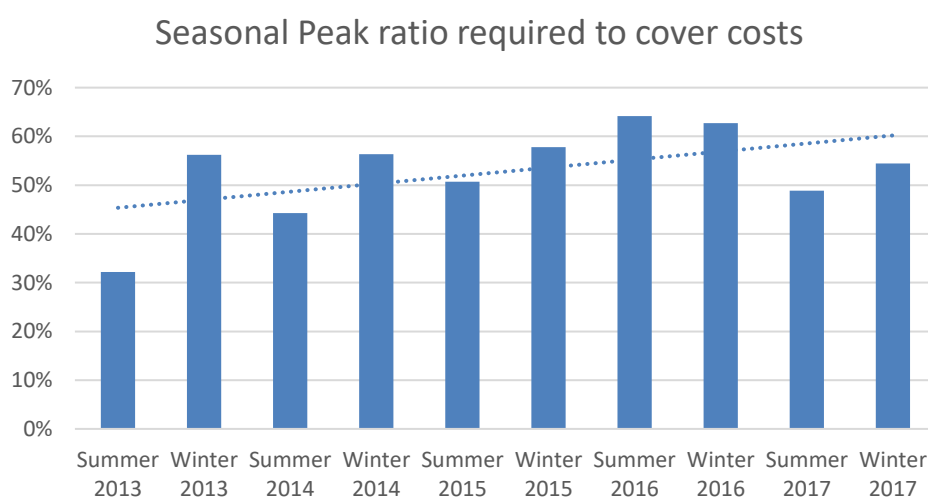
154. The below chart shows that the PPM cap understates this cost by £3-£6 per electricity customer:

Figure 2. Actual wholesale electricity costs for PPM customers compared to costs assuming a 70-30 peakload baseload split



155. Using the same data, we calculated the implied Peak ratio required to match this difference. The chart below shows that this ratio has significantly increased since 2013 but has now stabilised to 50-60% (implying a 50%Baseload-50%Peak split). To correct the inaccuracy, Ofgem could adjust the ratio or apply an uplift.

Figure 3. Peak ratio required to cover costs by season



156. Accompanying this response we are sending to Ofgem an excel spreadsheet titled "Electricity costs vs 70-30 baseload peakload split" that shows how the figures in the charts above, and the corresponding £3-£6 understatement in the PPM cap, were

calculated. We consider this to be the proof that the requirement to change the ratio exists and to the extent we say.

Question A6.5: What are your views on the necessity and size of an additional allowance for shaping and imbalance costs? Please provide evidence to support this.

157. Ofgem should have a significant amount of evidence available to it that proves that the costs of forecast error, imbalance and shaping are real and material costs that suppliers bear. Evidence includes the existence of financial incentives on suppliers to be in balance, products to enable it, and suppliers' submissions to the Ofgem RFI on the Financial Reporting Remedy.
158. In our response to WP5, we listed and calculated the costs of shaping and imbalance that need to be factored into the default tariff cap. We also informed Ofgem where it could get the source data to perform the same calculations. We have reproduced the relevant section below, and added a fifth column which describes the methodology so Ofgem can replicate the analysis. We are also submitting additional excel spreadsheets that show how we did the calculations for monthly and within-month shaping for gas that reconcile to the gas figures within first and second rows of the table below. These spreadsheets are entitled "Gas monthly shaping cost" and "Gas within month cost". We consider the information we are submitting to prove that these costs exist to the extent we show.

Table 7. Shaping and imbalance costs

Commodity Component	Current Cost	Issues and risks	Data sources for Ofgem	Calculation methodology
Shaping to monthly	£4/DF	CMA index does not cover monthly variances within seasons which is significant for gas.	ICIS Heren, ICE	Compares the monthly weighted average cost of commodity vs. the seasonal/quarterly average cost
Shaping to daily (gas) & half-hourly (power)	£11/DF	CMA index has no allowance for within-month gas shaping and 30/70 peak/baseload split is insufficient for power (£7/customer for gas and £3-6/customer for electricity).	ICIS HEREN, N2EX, APX	Compares the daily (gas)/ half-hourly (power) cost of commodity with the monthly average cost, using actual demand and spot prices
Imbalance	£0.4/DF	A comparatively small cost component, but can be high-risk.	Elxon, National grid	Calculated based on imbalance charges

QA6.6: What are your views on the necessity and size of an additional allowance for transaction costs relating to brokers and collateral?

159. In our response to WP5, we listed the transaction costs of brokers that would need to be included in the default cap. We also informed Ofgem where it could get the source data. Given that suppliers purchase commodity at the offer price and not the mid price, the allowance should also include the difference between offer and mid price.
160. The table below shows our actual incurred brokerage costs and the impact of using offer instead of mid price in the cap calculation:

Table 8. Brokerage and transaction costs

£/cust.	Gas	Electricity
Brokerage costs	✂	✂
Transaction costs (impact of using ICIS offer prices instead of mid prices in the PPM cap calculation for Winter 2017 and Summer 2018)	0.24	0.24
Total	✂	✂

161. In addition to all the items listed above, the wholesale allowance also needs to take into account transmission/distribution losses for electricity and unidentified gas. These costs are material as they equate to ca. 10% of the wholesale cost for electricity¹¹ and ca. 5% for gas¹², for a total of ca. £28/DF customer in 2018.
- Under the adjusted-PPM or the updated reference price approaches, Ofgem needs to ensure that these are covered by the cost allowance.
 - Under the bottom-up approach, an uplift equal to the above percentages needs to be included in the wholesale allowance. Ofgem already applies these loss adjustments to BSUoS and other transmission charges so it could apply the same methodology to wholesale costs.

QA6.7: Do you agree that our approach to updating the benchmark for the first cap period is appropriate?

162. No.
163. The commodity index that is used to set and update the cap should be replicable by suppliers. Ofgem is currently proposing that the observation period for the initial period of the cap (December '18 – March '19) occurred in the past (from April 2018). Suppliers cannot replicate this retrospective pricing approach so this exposes them to

¹¹ Sum of Line Loss Factors and Transmission Losses Multipliers from Elexon

¹² Unidentified gas published by Xoserve

unacceptable commodity risk, which is not justified by the arguments set out in the consultation document.

164. We do not believe that a retrospective approach is consistent with the mandatory considerations in the Bill, including in particular the *need* for efficient suppliers to be able to recover their efficient costs. If suppliers do not – and cannot – match the hedging profile implied by the index, then Ofgem is imposing on them a material risk of incurring wholesale costs which are higher than those they are allowed to recover under the tariff cap's calculation, for reasons outside of their control.
165. Furthermore, a material under-recovery would seem unlikely to satisfy the legal requirements of proportionality found in European Union and Convention law. As a matter of principle, Centrica believes that retrospective regulation exposes the market to unnecessary regulatory risk. Ofgem does not appear to have considered these issues or to have prepared any substantive analysis that retrospective regulation is lawful and proportionate in this instance.
- Without prejudice to Centrica's strongly held views that applying retrospective assumptions in price controls may be unlawful and is certainly undesirable (and while preserving our rights on this point), if Ofgem felt unable to avoid retrospection after performing an appropriately rigorous legal analysis of the various options, the least damaging position Ofgem could adopt would be to minimise the extent to which the decision is retrospective, and to maximise the opportunity for suppliers to replicate the assumed hedging strategy. To achieve this, Ofgem could use a three-month observation period to set the initial cap (e.g. July to September or mid-July to mid-

October), providing the ‘smoothing’ required while allowing suppliers to replicate it through hedging.

- Although suppliers would have to buy a significant amount of commodity over this period, this is possible given current market liquidity. Centrica would have to purchase the following volumes over the proposed three-month observation period:

Table 9. Centrica's required purchase volumes

	Gas	Electricity
Q1 demand	✂	✂
Gas Supply Agreements / Power generation	✂	✂
Daily market purchases required over 3 months	✂	✂

- Given that Centrica/British Gas is the largest domestic energy supplier, if we are able to buy sufficient volumes in the market then we would anticipate that all other suppliers will also be able to do so.
- Ofgem states that it cannot use only future prices because “the relevant licence condition will not be published until 1 October”. However, it could instead (as explained above) use future prices from the time of the publication of the responses to this consultation, which would (without prejudice to our strongly held concerns about the inappropriateness and potential unlawfulness of Ofgem adopting retrospective assumptions) significantly reduce the commodity risk faced by suppliers compared to the current proposal.

Appendix 7: Policy and network costs

166. Given their interlinked nature, we present our answers questions A7.1, A7.2 and A7.3 together.

Question A7.1: Do you agree with the way we propose to estimate the costs of each of the schemes for setting the baseline level of the cap?

Question A7.2: Do you agree with our proposed approach to forecasting the costs of each scheme?

Question A7.3: Do you agree with the data sources that we propose to use to forecast the expected demand base for each scheme? Do you have any alternative suggestions which would more accurately track trends in eligible demand?

167. Yes, for most of the schemes. In general, we think that Ofgem has taken into account responses to WP4 and produced a sensible set of proposals for setting the baseline level of the cap.

168. In particular, we welcome:

- For the Renewables Obligation (RO), Ofgem's recognition that "the scale of the discounts that suppliers are able to achieve is likely to be relatively small and to diminish going forward, due to the closure of the scheme to new generation". We welcome Ofgem's consequent proposal to calculate the allowance for the costs of the RO by combining the buy-out price with the level of the obligation as set by BEIS, both in the baseline and when updating the cap.
- For the Energy Company Obligation (ECO), Ofgem's proposal to set the allowance in the initial baseline with reference to the most recent version of the BEIS IA. Clearly, this would need to happen for the adjusted-PPM as well as the bottom-up and updated reference price approaches. We also welcome Ofgem's recognition that the demand base from which ECO costs are to be recovered is not yet finalised, so it needs to retain some flexibility in this area.
- For Warm Home Discount (WHD), Ofgem's recognition that costs do not vary with consumption and therefore should be included in the level of the cap at nil consumption.
- For all other policies apart from WHD, Ofgem's recognition that costs do vary with consumption and therefore should be included in the level of the cap at TDCV but not at nil consumption.

169. However, we do have some specific comments on Ofgem's proposals for each scheme.

ECO

170. Ofgem's estimate of ECO costs in Table A7.3 appears to us to be incorrect because of an incorrect input value. Ofgem appears to have used the Net Present Value (NPV) figure - £638m per annum - from the current BEIS Impact Assessment (IA). We presume

that Ofgem intended to use the annual supplier cost figure, from table 6 of the BEIS IA, which is £620m.

171. In paragraph 3.24 Ofgem states that “[Data suggests]...total supplier expenditure in ECO2t may have been lower than annualised forecast cost in the IA (although we are continuing to analyse whether this is in fact the case)”. Whether or not expenditure in ECO2t may have been lower than anticipated is not relevant to a forward-looking analysis. We expect ECO3 spend to be much nearer the cost envelope.

CfDs

172. The methodology suggests using the published interim levy rates (ILRs) and does not mention any adjustment for losses. Given that we pay the interim levy rate on our volumes as measured at Notional Balancing Point i.e. volumes which include transmission and distribution losses, the ILRs will need to be inflated by an amount to allow for losses if the derived rate is to be applied to meter point volumes for the cap. The simplest way to do this would be to use the same adjustment for losses that is applied for BSUoS in the PPM price cap model (we also pay for BSUoS based on volumes at Notional Balancing Point).

Capacity Market (CM)

173. We support Ofgem’s proposed approach to market aggregate CM costs. However, we do not support use of FES¹³ scenario data to apportion an amount to domestic (para 3.9). FES data is not a reliable source for such an important industry assumption:
- The FES data used (peak demand i.e. single point in the year) is inconsistent with the way CM costs are applied (based on 4-7pm consumption, M-F, Nov-Feb)
 - No justification is provided for why using an average of the various FES scenarios would provide a reliable estimate of likely outcome. The scenarios do not have an equal probability of occurring.
174. We have an alternative proposal that we believe would be a more appropriate approach.
175. A market rate (£/MWh) for consumption during the CM chargeable period can be derived by dividing the aggregate total CM cost by the aggregate total CM chargeable volumes (EMR can provide this data). This then needs to be converted to rates that can be applied to total annual consumption, both for single and multi-rate meters. This can be done by multiplying the market rate by the proportion of annual consumption that occurs during the CM chargeable period for single and multi-rate meters (4pm – 7pm, Mon-Fri, Nov-Feb). Elexon can provide data for these proportions. Future values could then be updated to reflect the latest forecasts for aggregate CM costs with an assumption about future demand changes based on the BEIS data proposed for RO and FiT e.g. if BEIS forecasts suggests a 1% yoy reduction in demand, this could be applied uniformly to the latest historic data for CM.
176. The CM will move to gross charging from Oct-18. The calculations will need to take account of this.
177. Our CM costs are based on volumes at the GSP, so any initial (and future) £/MWh needs to include an adjustment for distribution losses if it is to be applied to meter point volumes

¹³ National Grid’s Future Energy Scenarios

for the cap. The PPM price cap model includes values for Distribution losses already which could readily be used for this.

AAHEDC

178. AAHEDC costs are based on volumes at GSP so will require the same adjustment for Distribution losses.

QA7.4: Do you agree with our proposal to use the existing model to estimate the network costs that suppliers incur?

179. Yes

QA7.5: Do you have any views on the impact of using information on the average share of consumption that takes place in peak periods to estimate electricity transmission charges?

180. We consider that it is reasonable to use market average data on consumption shares. The average share of consumption that takes place in peak periods should be based on the most accurate and up to date Elexon profile data and reviewed periodically.

Appendix 8: Operating costs

181. We agree that, for all approaches, Ofgem should ensure that the operational cost allowance in the cap reflects efficiently incurred costs, taking into account legitimate differences in costs to serve between suppliers that have nothing to do with efficiency. Such differences include, but are not limited to, the additional cost to serve vulnerable customers and the lower cost to serve customers who interact online. We have a disproportionate number of customers who could be considered vulnerable. We have X customers on the Priority Services Register (PSR) and X who receive the Warm Home Discount.
182. These customers have a wide variety of additional service needs. Of the customers on the PSR, X are of pensionable age, X have physical wellbeing issues (e.g. arthritis and poor mobility), and X have serious illnesses. The remaining X have a wide range of requirements (they include those with children aged five and under, mental health issues, sight and hearing loss, and language barriers). British Gas carries out a variety of activities for some of these groups, including free gas safety checks, the production of communications in different formats, and carrying out quarterly meter reads. These will all incur additional costs. Furthermore, as a whole these customers tend to contact us more frequently than non-vulnerable customers (X% more than non-PSR customers), even when they have access to online services. On average their contact costs are around £X per customer higher than a comparable standard credit customer and around £X per customer higher than a comparable direct debit customer.¹⁴
183. OVO's pricing implies an extra cost of £60 of supplying a customer offline to one that interacts purely online. We do not have any online tariffs for which a customer loses any online benefit if they interact offline, hence we do not have any like-for-like figure that we can cite to the £60 online discount.
184. More generally, an operational cost allowance in the cap that is less than what the Bill requires could result in unintended consequences, including a detrimental impact on service. For example, X leading to a significant increase in abandoned calls X.
185. By this stage we would expect Ofgem to have made specific, quantified and fully reasoned proposals for how the operational cost benchmark will be set (e.g. which suppliers, with what weightings, and therefore what level) and adjusted (e.g. which adjustments, by what amount). Specific, quantified proposals are required in order for stakeholders to understand and comment on the impact of the proposals. It is also not possible to say which adjustments should be made to the benchmark unless the initial construction is understood.

¹⁴ These figures have been obtained by allocating call centre costs (including related overheads) on the basis of the number of minutes spent on the phone by our call centre agents. We have calculated a per-account figure and then doubled this to obtain an estimate of the differential for both fuels.

Question A8.1 Do you agree with our proposed approach to estimating suppliers' operating costs (including our focus on total historical costs per customer, and estimating separate values for gas and electricity)?

186. The broad methodology that Ofgem has outlined for estimating suppliers' costs appears reasonable. However, the robustness of the analysis will ultimately depend on the data provided by suppliers, which we have not been able to see. At the moment, this area of Ofgem's work is not sufficiently transparent to constitute appropriate consultation. This is a procedural error and it has substantive consequences: it means that Ofgem will not benefit from proper, informed responses and its decision-making will, accordingly, be compromised.
187. Ofgem's description of the cost estimation process does not make it clear how it intends to control for the mixture of payment methods that will be covered in the data provided as part of the request for financial information issued 28 March. This is an important omission.

Focus on total historical costs

188. We agree with Ofgem's focus on total historical costs. Given the different judgements that suppliers will have made when allocating costs to different lines, an approach that sought to benchmark each cost line individually would likely lead to a benchmark well below the efficient level.

Separate values for gas and electricity

189. We agree in principle with a separation of the analysis into gas and electricity. However, it is important that Ofgem's analysis is not affected by mismatches in allocation methodologies between suppliers.
190. For example consider the case in which some suppliers have an allocation methodology that loads relatively more costs on to gas, while others load relatively more costs on to electricity. Were Ofgem to use a benchmarking method such as taking the lower quartile, the resulting dual fuel cost could be well below that of an efficient supplier.
191. At a minimum, Ofgem should review the costs per account for gas and electricity for each supplier. This will minimise the risk that there are not suppliers included within the benchmark which have a particularly low cost for one fuel, but a high cost for another based on a misallocation of costs between the two. If this appears to be the case, Ofgem should carry out the benchmarking exercise on dual-fuel costs for each supplier, and then pick the individual gas and electricity costs from the supplier(s) selected to be the benchmark.

Other allocations

192. Ofgem is not proposing to carry out a separate benchmarking exercise for customers with different types of electricity meters, or customers in different regions (capturing changes in network prices elsewhere in the cap). Given the data limitations that suppliers will face, and the likelihood that any such variations will not be large, this appears to be a reasonable approach.
193. Ofgem is not proposing to carry out a separate benchmarking exercise for customers specifically on default tariffs. Suppliers are unlikely to be able to accurately allocate all

cost lines to different tariff types, and so this approach seems reasonable. It is nonetheless important that the cap takes into account the costs driven by customer characteristics (such as vulnerability or online status), described in our response to A8.8.

194. Although not explicitly stated in the appendix, Ofgem's April RFI requested total domestic supply costs. This will therefore produce average costs across standard credit, direct debit, and prepay customers. The appendix provides no information on whether or how Ofgem has disentangled the costs for different payment methods. If it has not done so, the costs presented in table A8.1 are likely to represent a mixture of costs under all payment methods (including prepay). Suppliers are unlikely to be able to accurately allocate all cost lines by payment method, and so we would not suggest that Ofgem carries out an entirely separate benchmarking exercise by payment method. However, it is currently unclear how Ofgem proposes to control for the different payment method proportions of different suppliers. We discuss how it could resolve this issue in our response to question A8.8.

Question A8.2 Should a variable component of this allowance be split out to reflect differences in bad debt costs between customers with higher and lower consumption?

195. Bad debt costs are incurred as a result of consumers failing to pay their bills. Customers with higher levels of consumption have higher bills to default on (and, all else equal, will find bills a higher proportion of their income and so are more likely to default anyway). There is therefore a clear prima facie rationale for allocating a large proportion of bad debt costs to the variable component of the allowance.
196. This is an example of a more general issue which Ofgem will face when designing the cap – which costs to allocate onto the unit rate, and on the standing charge. There is no single part of the Policy Consultation or the accompanying questions where this issue is addressed comprehensively. We have therefore set out our views here, with references to the appropriate Appendices.
197. It is important that Ofgem gets this aspect of the cap design correct. An allocation of costs which is not cost reflective could lead to a variety of adverse consequences:
- If the split between the unit rate and standing charge does not appropriately reflect suppliers' costs, suppliers with a particularly high proportion of low- or high-consumption customers may be unable to cover efficient costs of operation, contravening the matters to which Ofgem must have regard in the Bill.
 - In addition, consumers would be faced with prices (and thus incentives to vary their consumption) not in line with actual costs.
198. Below, we set out what a cost-reflective design would mean for each component of the cap.

- **Wholesale costs:** The majority of these costs are direct energy costs and so should be allocated to the unit rate.
 - **Network costs:** These have both standing charge and unit rate components, and as indicated in response to A7.4 we agree with Ofgem's use of a model to estimate these costs.
 - **Policy costs:** These costs should be allocated depending on how they are incurred. As explained in our response to A3.4 (in the context of how Ofgem should update a competitive reference price), while most policy costs relate directly to consumption, some (including the Warm Home Discount) will apply at nil consumption.
 - **Operating costs:** Most operating costs will not vary with consumption and should therefore be recovered via the standing charge. However, as explained above, bad debt charges should be recovered through the unit rate, given their link to consumption. As set out in our response to A12.1, this should also apply to the bad debt component of the payment method differential.
 - **Costs of smart meters:** As indicated in our response to A10.1, smart metering costs depend not on the total number of operational meters, but the number of *smart* meters installed and operating in a given year. However, this is an area where suppliers are prevented from applying a truly cost-reflective pricing (for example, suppliers are not permitted to charge consumers for smart meter installation). Since a cost-reflective price is not possible, we suggest ensuring the costs of smart meters are recovered through the unit rate. As explained in our response to A10.3, this would allocate costs to those customers with the most to benefit from smart meters.
 - **EBIT:** EBIT is earned on all costs. It should therefore be added as a constant percentage to both the unit rate and standing charge.
 - **Competitive headroom:** Competitive headroom does not relate to a cost as such (it is intended to provide headroom for price differentials above costs), and so it is not possible to state which allocation is most cost-reflective. However, as indicated in our response to A11.1, headroom should be set as a percentage of the total bill (i.e. both the unit rate and standing charge) to avoid large distributional effect on consumers.
 - **Costs headroom:** This is required to account for errors, uncertainties and variations in the level of efficient costs that are not accounted for elsewhere in the cap design, and so may include all cost components. It is therefore appropriate for it to be added as a constant percentage to both the unit rate and standing charge.
199. The reference price approaches will not produce a specific benchmark for all these categories in the same way as a bottom-up approach. As we set out in our response to Q1 of the main consultation, this makes a reference price approach less transparent than a bottom-up approach, and it may be more difficult to demonstrate the cap is designed in a cost-reflective manner. Nevertheless the same issues regarding the split between the standing charge and unit rate will apply. As described in our response to A2.2, it is important to ensure that the benchmark at nil consumption is set in a way which is at least consistent with the benchmark at TDCV.

Question A8.3 Do you consider 2017 to be an appropriate period on which to base our benchmark, or are there reasons to think a longer period would be more representative?

200. We agree in principle that Ofgem should base its benchmark of efficient costs on the most recent available data.
201. However, the use of a short time period may be problematic if suppliers have experienced “lumpy” investment costs. For example, if a supplier’s billing system were fully depreciated, this may cause it to appear to have lower costs, and be selected for any benchmark. However, these costs would be unsustainable in the long-run.
202. If this effect were significant, it might be manifested in:
- The range of per-customer costs across suppliers being narrower within a single year than for the three-year averages; and
 - benchmarks which select the lowest cost supplier (e.g. minimum or lower quartile) resulting in lower costs for the single year than across multiple years.
203. Given the rounding in the ranges presented in Appendix 8, it is not possible for us to assess whether this is the case. A confidentiality ring that allowed suppliers’ advisors access to the data would be required for us to check this.
204. If “lumpy” investment costs were an issue, Ofgem would need to carry out benchmarking using a period long enough to smooth out this effect.

Question A8.4 Do you consider that default tariff customers have higher or lower operating costs than other types of customers?

205. As we explain in response to question A8.8, a variety of factors (including payment method, online status, and vulnerability) affect the cost to serve of customers. These factors may be correlated with tariff choice, which means it is difficult to disentangle any effect of tariff choice itself on cost.

Question A8.5 Do you agree with our proposal of where to exclude suppliers from our benchmarking analysis?

206. We agree that the exclusions highlighted in the Appendix are reasonable (suppliers with less than 250,000 customers, niche business models, unreliable data (where it prevents reliable analysis), or which are non-compliant. The rationale for such exclusions is identical to the exclusion of suppliers from the option 3 competitive benchmark. Our response to question A3.1 provides further context on why these exclusions are important.
207. We would additionally recommend Ofgem excludes businesses which have been trading for less than a year, since there will be greater uncertainty whether these have a viable long-term business model. Note that we believe this to be a highly conservative approach, since by no means will all suppliers with unsustainable business models fail within their first year of operation.

208. Ofgem should also exclude businesses which have ceased trading (demonstrating that the business model was not viable).
209. There is also a strong case for excluding suppliers that have not been operating at sufficient scale for a reasonable period of time. This is to avoid including any suppliers whose prices may not be sustainable and whose customer service arrangements are not proven at scale. We would suggest that only suppliers that have been operating with proven customer service credentials at reasonable scale for over one year are included. We would suggest that “reasonable scale” should start at the 250,000 customer account obligation threshold.
210. More generally, as indicated in our response to WP4, it is crucial that the price cap methodology recognises the artificial competitive distortion created by small supplier exemptions, and we urge Ofgem to press the Government to remove these distortions at the earliest opportunity.

Question A8.6 Do you agree with our proposal of what to include in our definition of operating costs?

211. We agree that fines for non-compliance should remain outside the cap (i.e. not be regarded as efficiently incurred costs for purposes of cap setting). However, it is possible that some actions that incur a fine would themselves result in a reduction in cost (for example a reduction of customer service levels below what would be provided by a supplier that is fully compliant with relevant provisions of the supply licence). Therefore, if Ofgem includes in its benchmark suppliers which incurred fines, it will need to make an adjustment to include an estimate of any benefits to the supplier from actions which prompted the fines.
212. Ofgem is proposing to exclude “exceptional restructuring costs”, and has separately requested details on these costs as part of its follow-up questions to the 28th March RFI. It is difficult to comment on the appropriateness of this without a definition of what different suppliers constitute as such a cost. Ofgem will also need to ensure that all such costs are included when it carries out its assessment of supplier financeability.
213. We agree with Ofgem’s proposal to move the costs of administering ECO, FiT and WHD into the policy allowance, and to move transaction costs associated with purchasing wholesale energy into the wholesale allowance. However, it will clearly be critical that these costs are properly accounted for elsewhere in the cap.

Question A8.7 Do you agree with our proposed approach to benchmarking operating costs under a bottom-up cost assessment?

214. Ofgem does not present a minded to view about the efficiency approach it should adopt for its benchmarking of operating costs. However, we note that Ofgem has tended to use an “upper efficiency quartile” benchmark in its RIIO network price controls for gas and electricity networks. This is equivalent to a lower quartile cost benchmark in this context. However, there are key differences between the default tariff cap and the RIIO network price controls that mean it would be inappropriate to impose the same benchmark in this market.

- The greater the potential for errors in efficiency estimation, the less aggressive any efficiency benchmark can be. For example, if it is not possible to control for exogenous differences in cost between companies (i.e. there is latent heterogeneity), there is a risk that a more “aggressive” benchmark will simply reflect differences in factors outside companies’ control. While, for example, RIIO-ED1 took three years to put in place (and built on Ofgem’s extensive experience of past price controls across the networks), the timeline for the default tariff cap gives less than six months for Ofgem’s analysis and is based on no such past experience. Given the greater potential for errors, we would expect the efficiency benchmark used for this retail cap to be less aggressive than that used to set the network price controls.
 - While increased uncertainty could lead to the benchmark being set too low or too high, Ofgem must have regard to the asymmetric nature of this risk. A benchmark set below the efficient level would contravene clauses 1(6)(b) and 1(6)(d) of the Bill, while a benchmark set above the efficient level would not contravene any of the matters of which Ofgem must take regard. (see also para 39 and 40 of the Legal Annex.)
 - In addition, the RIIO network price controls allow companies a variety of other “bespoke” adjustments to cover company-specific factors (for example, to take account of regional wage differentials). By contrast, Ofgem is proposing that the efficient benchmark for the default tariff price cap will only cover an efficient supplier with “average” characteristics,¹⁵ meaning that suppliers with worse than average costs outside their control will be unable to recover their efficient costs.
215. For these reasons, a less “aggressive” benchmark than the lower quartile would be more consistent with Ofgem’s precedents on efficiency benchmarking and is what the Bill requires.
216. Ofgem has noted elsewhere in its consultation that headroom can be used to compensate for these types of issues. In general cost uncertainty should be dealt with directly. This means that the choice of benchmark should reflect the uncertainty involved, for example by taking a more cautious approach in the methodological choice. Only if this is not possible should it be taken into account elsewhere in headroom. If this is the case, it is essential that this headroom is *in addition* to the level of headroom required to maintain switching levels. Our response to the questions in Appendix 11 explains the distinction between “competition” and “cost” headroom in more detail.

¹⁵ Appendix 8 para 2.38

Question A8.8 Which if any of the factors listed in Table A8.2 do you think we should take into account when choosing our benchmark? Do you have any suggestions for how we could estimate the materiality of the impact of any of these factors on costs?

Company size

217. We consider that there are limited economies of scale in the energy market: A supplier with a quarter of a million customers (the minimum threshold proposed by Ofgem for the benchmarking exercise) should already be at the minimum efficient scale.

218. As explained below (in order of cost magnitude), there are no significant costs that would be fixed in the long-run for a medium-sized supplier.

- **Metering costs** are driven primarily by meter rental payments. These are variable, not fixed costs. Meter rental payments are not linked to the size of the supplier and, while we are not able to comment on the commercial arrangements between MAPs and other suppliers, we would expect smaller suppliers to tend to face the same costs. Most of the remaining costs consist of field operatives. A smaller supplier would be able to contract these operations out to a large organisation, taking advantage of any economies of scale.
- **Central overheads** will, to a large extent, vary with the size of the business. For example:
 - i. HR costs scale with the number of employees (e.g. call centre operatives and field engineers).
 - ii. Property costs will scale similarly – a firm with fewer employees will need less office space in which to house them.
 - iii. Many IT costs are linked to the number of employees - e.g. the costs of procuring desktop computers, or licences for these systems.
- **Customer contact costs** consist primarily of call centres. Any fixed costs are at the level of a call centre – while a large supplier like British Gas will have multiple call centres, a smaller supplier may have a single call centre. In addition, smaller suppliers can outsource call centres (as British Gas does for some calls).
- **Billing and payment collections** are driven mainly by bad-debt related costs. Bad debt itself will scale with a suppliers' revenue, and smaller suppliers are likely to use an external collection agency, taking account of any economies of scale. The costs of producing bills and statements are also driven almost entirely by the volume of documents.
- **Sales and marketing costs** include commission and internal sales staff, which will all vary with a company's size. Although there may be some economies of scale involved in above-the-line marketing, a smaller firm is likely to flex its marketing channels (e.g. focusing more on below-the-line marketing and commission-led sales) to compensate for this.
- **Depreciation and amortisation costs** are likely to be linked to assets (e.g. property) which, as explained above, will vary with the size of the firm.

219. Ofgem should already have sufficient data to assess whether economies of scale hold for certain ranges of scale, given the cost information it has requested from companies. Indeed, in Appendix 2 paragraph 3.13, Ofgem explicitly states that it will be using data on realised costs to assess whether economies have scale have been borne out for First Utility and Ovo in practice.

Customer acquisition costs

220. As indicated by Ofgem, customer acquisition costs are part of the lifetime cost of acquiring a new customer. It is therefore appropriate that they are included within the price cap – if they were not, suppliers would have a disincentive to acquire new customers, blunting competition.
221. We agree that there is a need to ensure suppliers' data amortises customer acquisition costs in a consistent way, in order to avoid distorting the efficiency benchmarking exercise.

Stage of smart meter rollout

222. Please refer to our response to the questions in Appendix 10.

Legacy pension obligations

223. Clause 2(6)(d) of the draft bill requires that Ofgem ensures efficient suppliers are able to finance their activities. Suppliers with legacy pension obligations inherited these upon liberalisation of the market. The presence of such obligations is therefore independent of how efficiently these businesses are now operated, and so it is entirely possible that an efficient supplier could have legacy pension costs as a result of its history pre-liberalisation.
224. The Bill therefore requires that the price cap be set in a way which ensures efficient suppliers are financeable – taking into account the level of any legacy pension obligations they have.

Customer service level

225. As described above, Ofgem should ensure that any benchmark of operational costs excludes suppliers where customer service has breached their licence conditions. Ideally, the price cap would also control for the customer service level provided by suppliers, allowing suppliers (and their consumers) to trade-off between additional cost and higher levels of customer service.
226. However, we recognise that in practice it may not be straightforward for Ofgem to take account of customer service in a quantitative fashion. Simple benchmarking of metrics of customer service such as complaints levels could potentially be misleading if they did not control for factors that can affect complaints levels such as the proportion of customers with complex needs, or the speed of suppliers' smart meter rollout (since the replacement of a meter can be a trigger for complaints).
227. In this regard, we currently employ over ✂ staff who are available to provide customer services for domestic energy customers. These staff are distributed over seven UK locations (plus an additional three outsourced contact centres). Some of these locations include highly specialised teams, such as in Hattersley where we have a team of over ✂ staff devoted to providing specialist advice on sensitive debt issues.

228. As discussed in our responses to the questions in Appendix 14, a cap that is too tight will rule out certain higher cost/quality business models. This would be detrimental to consumers, and we believe this should be assessed and form part of Ofgem's decision on the overall level of the cap.

Participation in industry code panels and work groups

229. As a responsible member of the industry, Centrica participates in industry code panels and work groups, and incurs significant costs in doing so. Nevertheless, we agree that these costs are relatively small as a proportion of total costs and can be difficult to quantify. They should therefore be taken into account by ensuring that suppliers who participate fully in such work form part of the wider benchmarking.

Payment method breakdown

230. It is essential that the tariff cap controls for differences in payment method type, and our response to the questions in Appendix 12 includes input on how the payment method uplift should be applied.

231. However, it is extremely unclear from the documents provided by Ofgem how the payment method adjustment would be applied in practice. The historic cost RFI that Ofgem sent to suppliers did not request any breakdown of cost by payment method. Ofgem has not indicated that it has carried out any adjustment for payment method in the figures provided in Table A8.1. We therefore expect that these figures will reflect a weighted average of costs for all payment methods (prepay, standard credit, and direct debit), where each supplier included in the benchmark will have different weights, representing the payment method mix of its portfolio.

232. We expect that Ofgem will need to carry out a process such as the following:

- Adjust the costs of each supplier in the benchmarking process to represent a "DD only" portfolio. Suppliers' response to the February RFI could be used for this exercise, although it will not provide any guidance on the differential between suppliers' prepay and credit costs.
- Carry out the benchmarking exercise on this basis.
- Add on the payment method uplift, as explained in appendix 12.

233. Further clarity is required on the proposed approach.

Proportion of vulnerable customers

234. In our response to Working Paper 1 we noted that Ofgem's 2017 "Vulnerable Customers in the Retail Market" report demonstrates the much higher proportion of PSR customers among the large suppliers than small and medium suppliers. Since then, Ofgem released the 2018 version of this report. This shows that the gap has increased significantly, with larger suppliers now having over 25% of their customers on a PSR, compared to around 6% for small and medium suppliers. It is therefore even more crucial that Ofgem takes into account the effect of vulnerable customer mix on suppliers' costs.

235. As stated in Centrica's response to WP5, it should be possible for Ofgem to request data from suppliers to quantify the additional costs of vulnerable customers.

236. We have carried out such a calculation for one component of the cost differential by using Centrica's own data, allocating the costs of our contact centres based on a

measure of call “effort” (number of calls multiplied by average handling time). We agree with Ofgem that there will be some overlap with cost differentials caused by payment method, and it is important to not double-count these. We have therefore calculated the differential within each payment method. On average, direct debit customers on our Priority Services Register incur contact costs that are £X higher per dual fuel account than those not on the PSR. The corresponding figure for standard credit customers is £X.

237. Similar results are also produced when using the Warm Home Discount as the measure to identify vulnerable customers, rather than the PSR. However, as we noted to Ofgem in its consultation on providing protection to vulnerable customers, some suppliers appear to have a more pro-active approach to identifying customers for inclusion on their PSR. It is right that suppliers with a more-proactive approach are compensated for their (efficiently incurred) costs of doing so. In this instance, the PSR may therefore be a more appropriate metric to use than the Warm Home Discount.
238. In order for this exercise to be done properly, Ofgem will need to gather industry-wide data and disclose it to suppliers, in order to enable a proper, transparent consultation.
239. Customers with certain “vulnerable” characteristics (for example those on lower incomes) are also more likely to struggle to pay their bills on time. Ofgem’s own data shows that, even after controlling for payment method, customers of the six large energy suppliers are considerably more likely to fall behind with their payments.¹⁶ Ofgem needs to ensure the price cap controls for such exogenous differences in cost to serve.

Proportion of customers serviced online

240. As noted by Ofgem, customers who manage their accounts online are less expensive to serve. As shown by Ofgem’s 2017 consumer engagement survey, customers of smaller suppliers are much more likely to use online account management than the six largest suppliers.¹⁷
241. Ofgem states that “it will not be straightforward to develop a robust estimate of the incremental cost of supplying an offline customer” but provides no justification for why this should be the case.
242. In principle, Ofgem should have all the evidence it requires as part of its February RFI. However, it will need to distinguish between online tariffs where the customer is restricted from using call centres, and online tariffs (such as Centrica’s) where there is no such restriction – the cost to serve will be higher for the latter.
243. Once Ofgem has estimated these differentials, it should be in a position to add them on to the benchmark suppliers’ costs, to produce a cost that is reflective of a more typical mixture of online customers.

Proportion of dual fuel and electricity-only customers.

244. As indicated by Ofgem, dual fuel customers will incur lower costs than two separate single fuel customers.

¹⁶ See Baringa for Scottish Power (2018), *Creating a level playing field in the GB retail energy market*, p26

¹⁷ Ibid, p28

245. Many communications costs will be lower for dual fuel customers (relative to two single fuel customers). This is since communications (e.g. regarding billing or smart meters) will only need to be made once.
246. We have quantified these costs in the same way as the vulnerable customer analysis described above. Overall, our contact costs for two single-fuel accounts are around £ higher than a dual fuel account. This effect is present regardless of whether we control for the effect of payment method and vulnerability. The differential is:
- £ for direct debit customers on the PSR
 - £ for direct debit customers not on the PSR
 - £ for standard credit customers on the PSR
 - £ for standard credit customers not on the PSR
247. Credit and collections costs will also be lower, as the same debt collection charges are incurred regardless of whether a customer is dual or single fuel. As stated in Q4 of our response to Ofgem's February RFI on payment methods, these costs totalled approximately £m in 2017, which is equivalent to approximately £ per customer. These costs would therefore be £ higher for two single-fuel accounts than one dual-fuel account.
248. Given the magnitude of these differences, it will be essential for Ofgem to ensure its benchmarking of operating costs takes into account the lower costs to serve of dual fuel customers. In addition, Ofgem will need to ensure that the final price cap is set in a way that means suppliers with a higher than average proportion of single-fuel customers are able to recover their costs.

Question A8.9 Do you agree with our proposal to use CPIH to index the allowance for operating costs within the default tariff cap?

249. In general we agree that the CPIH is a reasonable index to use for the (non-smart) operating costs of suppliers. However, as part of its analysis of suppliers' historic costs, we would expect Ofgem to confirm whether or not this is the case – if suppliers' non-smart operating costs have increased faster than CPIH, a different index may be required. As discussed on our response to the questions in Appendix 10, smart meter costs will need to be updated in a way which properly accounts for the changing costs of the rollout.
250. However, some costs will be driven by regulatory requirements. For example, we estimate that the cost to British Gas of implementing Faster Switching (and excluding the wider industry costs recovered by the DCC) will be c£m capex (spread over 2019) and a c£m incremental increase in opex each year. A generic cost index would not be able to take account of such costs. Going forward, Ofgem will therefore need to assess the costs of such additional regularly requirements and make allowance for them as part of the price cap.

Question A8.10 Should the default tariff cap be reduced over time to reflect an expectation of general productivity improvements – and if so – at what level should this efficiency factor be set?

- 251. We agree with Ofgem's minded-to position to not include a reduction in the default tariff cap for general productivity improvements over time.
- 252. There is a fundamental difference between a temporary price cap on a competitive market, and a price control for a monopoly industry such as the regulated networks.
- 253. Furthermore, the reduction of the cap carries a risk of severe detrimental consequences. Ofgem will be in no position to accurately forecast any efficiency gains in the future. Any mistakes could lead to an efficient supplier being unable to recoup its costs.
- 254. Even if this were not the case, a reduction in the cap would rule out suppliers being able to use efficiency gains in other ways of benefit to customers. For example, a supplier which has reduced call centre costs may choose to "spend" some of this efficiency gain on a higher quality of service for customers (e.g. through lower waiting times). A cap which required all efficiency gains to be passed through directly in the form of lower prices would preclude such innovations and competitive differentiation.

Appendix 9: EBIT

255. Ofgem should not accept the CMA's view of the level of the competitive profit margin. The CMA materially understated competitive profit margins for a number of reasons, including not recognising the requirement to hold sufficient capital to cover the peak requirement (rather than average requirement). The peak requirement includes capital to withstand short-term losses that suppliers periodically face as a result of unpredictable demand shocks that are beyond their control.
256. For a large supplier, this additional working capital can be highly material. We have previously calculated the additional requirement as being in excess of £~~30~~m for a large supplier, and suggested that a more reasonable range for competitive EBIT profits for an efficient supplier would be 4-6%.
257. We note that in both of the market investigations that it has undertaken since the Energy Market Investigation (EMI), the CMA has avoided using the return-on-capital-employed based approach that it used in the EMI for the purposes of informing its thinking about the competitive EBIT margin.

Question A9.1: Do you agree with our proposed approach to setting the EBIT margin?

258. No.
259. Ofgem is proposing to use an EBIT margin of either 1.25% or 1.9%, depending on the methodology it chooses to set the level of the cap. In this respect it is simply following the CMA rather than interrogating its analysis. Ofgem should not accept the CMA's view of the level of the competitive profit margin
260. Using a 1.25% EBIT margin would overlook the concerns that Centrica and a number of other industry stakeholders have expressed about the scalability of intermediary arrangements. Ofgem claims that it is not clear why intermediary arrangements should not be scalable in the sense that the CMA assumes, but there are a number of clear reasons to think this. In particular:
- The risks to which an intermediary would expose itself in serving a large standalone supplier with several million customers would be of an order of magnitude greater than the risks associated with providing intermediary services to a small or mid-tier supplier. Commodity price risks, risks associated with access to market liquidity in times of stress and counterparty risk all increase with the volume of supply. An intermediary may be able to absorb these risks on behalf of a small supplier, but it is far from clear that it would be able to do so for a large supplier.
 - The intermediary arrangements that are currently on offer in GB, have developed in relatively benign wholesale market conditions, and have yet to be properly tested in times of market stress. It would be irresponsible to hard-bake an assumption about

such arrangements into a price cap methodology when the resilience of these arrangements has not been fully tested in this regard.

261. Using a 1.9% EBIT margin would address these concerns about the scalability of intermediary arrangements, but would still considerably underestimate the sustainable level of EBIT margin that a standalone supplier of scale would need to make to cover its cost of capital. As we have explained in previous submissions:
- The CMA materially understated the working capital requirements of energy retail businesses, since they only allowed for average working capital requirements when suppliers must in reality hold sufficient working capital to allow them to cover their peak requirement. For a large supplier, this additional working capital can be highly material. We have previously calculated this requirement as being in excess of £30m.
 - The CMA's methodology did not make adequate allowance for the risk/contingent capital that a large stand-alone supplier would need to hold in order to be able to withstand short-term losses that suppliers will periodically face as a result of unpredictable demand shocks that are beyond their control. These risks of short-term losses – and therefore the need to hold capital – arise irrespective of the supplier's chosen hedging strategy. Since suppliers cannot immediately adjust their tariffs in response to these shocks, they must set capital aside to ensure that they can withstand periodic losses.
 - The CMA's assessment of capital requirements for regulatory collateral was based on errors in approach. The CMA assumed that suppliers could rely primarily on letters of credit rather than setting aside any capital for this purpose. However, it provided no evidence to substantiate its assumption that a large standalone supplier would have access to such facilities on the terms that its methodology assumed, particularly given the extremely thinly capitalised business model that the CMA was envisaging that such a supplier would operate.
262. Indeed, we note that in both of the market investigations that it has undertaken since the Energy Market Investigation, the CMA has avoided attempting to estimate firms' capital costs for the purposes of informing its thinking about the competitive EBIT margin. In the case of the current investigation into investment consulting, the CMA cited the difficulties associated with "the identification and measurement of intangible assets" in an industry with comparatively few tangible assets as a major factor contributing to its decision not to pursue such an analysis. This suggests that the CMA may itself have changed its views of the value of attempting with estimating quantify capital costs in such industries in light of the difficulties it encountered during the Energy Market Investigation.
263. In light of these concerns, we believe that Ofgem should give greater weight to alternative measures of required profitability – such as EBIT benchmarking – for the purposes of forming a view about the appropriate level of EBIT to build into the cap.
264. EBIT benchmarking of this type indicates that the required level of EBIT is considerably greater than 1.9%.

- The CMA's own analysis pointed to an EBIT of 3%.
- Evidence submitted by a number of other industry stakeholders showed this to be too low. This evidence is consistent with Centrica's view that an EBIT of 4-6% is required to allow a supplier to meet its cost of capital.

Question A9.2: Do you agree that it is acceptable to retain the WACC figure used by the CMA? If not, do you have views on the factors we would need to consider if we were updating the WACC?

265. Ofgem should only consider updating the WACC if it also considers updating the capital base estimates along the lines outlined above. We believe that any changes to the WACC since the CMA undertook its analysis are likely to be small compared to the errors of assessment resulting from the inaccuracies built into the CMA's assumptions about the capital base of an efficient standalone supplier of scale.
266. In any event, for the reasons explained above, we believe that there are inherent practical difficulties with basing an assessment of EBIT requirements in the industry on an assessment of suppliers' cost of capital, because of the difficulties explained above associated with accurately measuring the size of the efficient capital base of retail businesses whose sources of capital are largely intangible and therefore not reported on balance sheets. We believe that more weight should be placed on the results of an EBIT benchmarking analysis as a result of these considerations.

Question A9.3: Do you agree that we should maintain the CMA's estimates of the capital employed by energy suppliers? If not, please specify which element you think we would need to revalue.

267. Please refer to our response to Question A9.1 above. For the reasons explained in response to that question, we do not agree that the Ofgem should maintain the CMA's estimates of the capital employed by energy suppliers and believe that a number of elements of the methodology need to be revalued.

Question A9.4: Do you agree with our proposed approach to updating the EBIT margin?

268. Ofgem suggests that it is currently minded to update the EBIT margin in the same way as operating costs, i.e. using CPI. Ofgem acknowledges that there could be circumstances in which this would be inappropriate, but argues that this would nonetheless be proportionate for two reasons:

- First, “given the size of EBIT the margin”, the absolute impact on the level of the default tariff cap would be small.
 - Second, “trying to update some, but not all, inputs to the CMA’s analysis could introduce distortions”.
 - Third, the changes “would not be proportionate for a temporary cap”.
269. We do not agree that any of these reasons provides a sound rationale for ignoring potential developments that could render CPI inappropriate.
- Ofgem’s reasoning that the size of the EBIT margin is small is based on the assumption that the relevant EBIT margin should be 1.25% or 1.9%. However, for the reasons explained above, this is too low. In our view a competitive EBIT margin should be 4-6%.
 - Ofgem’s suggestion that “trying to update some, but not all, inputs to the CMA’s analysis could introduce distortions” makes no sense. While we agree that failing to address all of the problems with the CMA’s analysis is likely to result in a distorted price cap that does not accurately reflect the costs and risks that an efficient supplier would face, it is not clear why addressing some – but not all – of these issues would be worse than not addressing any of these issues at all. In any event, Ofgem itself appears to be suggesting that it is minded to make “some, but not all, inputs to the CMA’s analysis” for at least two of the methodology options it is considering (the “adjusted version of the existing safeguard tariff” and the “updated competitive reference price” approach).
270. Ofgem has provided no evidence or reasoning to support its claim that these changes “would not be proportionate for a temporary cap”, beyond its suggestion that the size of the permitted EBIT margin will be small (which we disagree with for the reasons explained above). In any event, Ofgem has not explained what it considers the relevant threshold impact should be for the purposes of assessing whether a change is “proportionate for a temporary cap”. The fact that the cap is temporary does not permit Ofgem to set the cap less carefully; it imposes a requirement to ensure that the “conditions for effective competition”, including smart meter rollout, can be met when the cap is in place.

Appendix 10: Smart metering costs

271. We are glad that Ofgem has recognised that the cost of smart meters needs separate consideration to other categories of cost, and that the price cap will reflect how these costs will actually evolve for the period over which the cap is in place. We also agree that where suppliers do not have control over the level of costs (DCC, Alt Han Co, SECAS, SEGB and SMICoP) that these should be treated as pass-through costs.

272. However, there are a number of aspects of Ofgem's proposals that will need to be addressed before they will properly reflect the costs of an efficient supplier. The main areas for development are as follows:

- Ofgem needs to provide transparency of the model it is using and the assumptions that populate it.
- The methodology for calculating the smart meter costs must be aligned with whatever methodology is used for setting operating costs. Part of this requires an acknowledgement of the fact that the proposed approach identifies the smart metering costs that are being allowed in each year of the cap.
- When undertaking an assessment of the efficient level of smart metering costs, account must be taken of the different stages suppliers are at in terms of the smart meter roll-out.
- The methodology must capture all costs associated with the smart meter rollout, including the rental agreement termination costs for conventional meters.
- If Ofgem is going to fix the cost allowance for smart metering for the duration of the cap, proper account must be taken of how the costs can be expected to change over time, including in response to the cap being in place.

273. It is important that Ofgem recognises that by setting this cap, it will be determining the level of the smart meter costs of an efficient operator.

Ofgem's approach to allowing smart meter costs under the cap also needs to be considered in the context of two important legal points:

- First: suppliers are under licence obligations to take all reasonable steps to rollout smart meters. This means that – to a greater or lesser extent – they have no choice but to incur the costs of doing so. It is particularly important in that context that Ofgem recognises that the steps that are 'reasonable' are those for which the efficient costs can be recovered under the tariff cap. If Ofgem demanded that suppliers took steps but were not reasonably able to recover the full costs of doing so, Ofgem would either be relying on an untenable interpretation of the smart meter rollout licence conditions and/or contravening section 1(6)(d) of the Bill.
- Second: the smart programme forms an important part of achieving the policy objectives behind the Bill because smart meters will enable customers to better engage in the competitive market place. The Bill's success is to be measured, in part, by the smart meter rollout: the cap is designed to be temporary, and smart meter rollout is a key part in its removal. A price cap which hampers the smart meter rollout will therefore not meet the objectives of the Bill. The smart meter roll-out is, effectively a requirement

of the Bill alongside the requirements of clause 1(6). This means that it is substantively important and it must be given appropriate, transparent treatment in the consultation.

274. These two reasons make it particularly important that smart meters are dealt with properly in the price cap; and, as we point out below, there is a serious risk of legal error here.
275. Finally, we would note that 2018 is a pivotal year for the smart metering rollout. There are many uncertainties facing suppliers as they progress their own rollout programmes, including the ramp up of DCC installations in both North and South regions, and the DCC's performance levels. To the extent that any material assumptions underpinning rollout forecasts are proven to require revision, we would expect these to be reflected in the price cap implemented on 1 January 2019.

Question A10.1: Do you agree with our minded-to position to include a separate smart metering index to reflect the changes in costs from the baseline (2017) to the initial year of the cap (2018)?

276. We agree that the net costs associated with smart meters need to be separately identified and subject to an indexation approach that reflects the change in costs throughout the course of the price cap period. This is not just from the 2017 baseline period to the initial year of the cap, but also in subsequent periods. This reflects the fact that the trajectory of costs will not follow the indexation approach that has been proposed for any of the other cost lines, including other operating costs.
277. The indexation approach that is applied will need to take account of both changes in the number of smart meter installations that take place and the overall stock of smart meters in operation in each year.

Question A10.2: Do you agree with our minded-to position to include an adjustment to the Reference Price (SMRPA) in the event a material difference is identified between the smart metering net costs of the suppliers making up the reference price and the model?

278. Whatever option is used to set the overall control (be it reference price or bottom up), Ofgem will need to adjust the baseline value that has been calculated under that methodology with the assumptions that underlie its calculation of smart meter costs arising from the application of its smart metering model.
279. In this respect, it is not correct for Ofgem to imply that it is not calculating smart metering costs for 2017. To be able to calculate an increment in smart meter costs between 2017 and the subsequent price cap periods it must be doing exactly that. Therefore, if the modelled net smart meter costs are used to calculate the indexation method to be applied to the baseline over time, the baseline must also be adjusted to reflect those modelled costs.
280. This will require Ofgem to look at the smart meter costs of the companies that contribute to the calculation of the baseline, and adjust them to correspond with those that determine the level of net smart meter costs. If a baseline other than 2017 is used (as may be applied within the bottom up methodology or the adjusted safeguard tariff

methodology), a further adjustment will be required to reflect 2017 smart metering costs. Failure to make these adjustments will mean that the cap doesn't cover the smart metering costs of an efficient supplier.

281. We note that the question implies that this adjustment will only be made if the difference is "material". We also note that para 1.33 of this Appendix talks about only making an adjustment if there is a "significant difference". In this context, we note that the CMA in the RII0-ED1 price control appeals said that a change would not be material if it had a "insignificant or negligible impact on the overall level of the price control". We consider that anything over 0.1% of supplier's controllable costs is a material difference that will need to be adjusted for.¹⁸
282. As a more minor point, we would suggest dispensing with the SMRPA acronym. An adjustment needs to be made to the baseline value for all methodologies. Once that is done, all of the methodologies would have the same forward indexation adjustment (which, under current proposals, is termed SMNCC).

Question A10.3: Do you agree with our initial assessment for the Smart Metering Net Cost Change, including our inclusion and assessment of the costs of SEGB, SMICoP and DCC charges?

283. We agree with an approach that treats a group of smart meter costs as pass-through costs. These relate to DCC, Alt Han Co, SECAS, SEGB and SMICoP. We cannot comment on whether these have been estimated on the correct basis given the calculations and numbers have not been presented in the Appendix. We have requested that Ofgem provides this information to allow proper stakeholder consultation.
284. As noted in the answer to the previous question, while it is fine to define a change in the cost of smart metering, it is also important that Ofgem recognises that this is only meaningful when presented alongside the 2017 baseline estimate to which it refers. Those values will therefore also need to be published and subject to consultation. We are unable to comment on whether the "indicative values" provided are reasonable given we do not know what level of smart metering costs these relate to.
285. We address our concerns relating to the current calculation of SMNCC in our answer to the next question.
286. Finally, whilst Ofgem does not explicitly address the issue, there is a question as to whether the costs of smart meters should be recovered through the standing charge or the unit rate within the price cap. Since the customers that are anticipated to benefit most from smart meters, by helping them to reduce consumption, are those with higher levels of consumption, there is a case for allocating at least some portion of smart meter costs specifically on to the unit rate in the default tariff cap.

¹⁸ This reflects the Competition Commission's view in the Carphone Warehouse case that "where the impact of any perceived error would be a 0.1% change in the price control we have concluded that such an impact is not material and would fall within an acceptable margin of error" (Carphone Warehouse v Ofcom: LLU price control appeal (2010) Final Determination para 1.62). The price control in this case almost entirely covered the controllable costs of Carphone Warehouse.

Question A10.4 Do you agree with the judgements we have set out regarding smart costs; in particular our choice of data and model, identification of relevant costs and benefits, and approach to variation?

287. It is very hard for us to answer this question, given that we have been provided with so little information to enable us to make an informed response. We requested that this be rectified¹⁹ but received a response²⁰ that declined to provide further detail.

288. With respect to the choice of model:

- Without seeing it, we can't say whether it is fit for purpose. However, we would note that it was built for an entirely different purpose (a social cost benefit assessment of a policy intervention). We would also note that it should have been entirely possible for Ofgem to build its own model and that may have been a better option to reflect the calculation that must be undertaken to estimate supplier net smart metering costs.
- If the BEIS model is to be used, we agree that adjustments will need to be made to it so that the costs and benefits of suppliers are properly accounted for. We can't comment on whether Ofgem has made the right adjustments without seeing the model and the adjustments that have been made.

289. With respect to the data that will populate the model:

- There are missing cost lines. The most important of these are listed below and we provide additional detail on the scale of each of these in Annex A.
 - Rental agreement termination charges for dumb meters. Ofgem hasn't requested any data on this.
 - Marketing costs. We are concerned that the marketing costs allowed for under the BEIS model only cover the costs of SEGB. We are also aware that these are not fully covered in BEIS ASR. The missing cost lines relate predominantly to engaging with customers to generate successful installation appointments.
 - Increased inbound customer enquiries around the time of smart meter installation.
- We have a more general concern that the underlying data that Ofgem is using to populate its model that is not subject to updating from the BEIS ASR is both out of date and has never been subject to consultation or challenge. We have previously set out where this is likely to be the case.²¹ It is unclear from the consultation how Ofgem will go about collecting the necessary evidence to adapt the approach for the costs that Ofgem says that it is reviewing. We consider that Ofgem must undertake an RFI to collect this missing data as a matter of urgency. Leaving it to stakeholders to essentially guess the missing line items or those that have been pre-populated from sources other than industry submissions is not a reasonable way to proceed.

290. With respect to controlling for non-efficiency costs variations:²²

¹⁹ Letter from Tim Dewhurst to Anna Rossington, 8 June 2018.

²⁰ Letter from Anna Rossington to Tim Dewhurst, 22 June 2018.

²¹ See our response to WP4.

²² Please note that our answer here relates to "Judgement 3" cost variations, not to the wider issue of inappropriate forecasting of costs (see our answer to A10.5).

- We are not surprised that the Ofgem analysis fails to pick up any change in costs based on rollout maturity, given the analysis that it undertakes. Looking at aggregate costs only as far as 2017 is unlikely to identify any issues, given sample size and the stage that most suppliers are at with their rollouts. However, there is evidence that the challenge of engaging customers becomes progressively harder and the costs of securing successful installations is therefore rising. Given British Gas is ahead of most suppliers in terms of smart meter roll out, it is well placed to evidence this and we do so in Annex A. We note that the issue of customer engagement will only be made more difficult following the imposition of the tariff cap and the reduction in engagement that we expect to follow. Any failure to reflect changing costs over time will affect the effort that can be put into creating install opportunities in future. Given the “All Reasonable Steps” framework, suppliers will be guided by the allowance embedded within the price cap in terms of the activities that can be undertaken.
- We expect it will be cheaper for suppliers to install meters where their business model attracts customers who want a smart meter. Further, it is likely that customers that switch will be easier to engage to get them to agree to have a smart meter installed. Both these factors may mean that the costs of smaller suppliers will be lower, at least for some of the cost categories.
- We also note that Ofgem identifies three areas that may drive non-efficiency variation in smart meter costs but then only investigates two of these. Ofgem should consider to what extent differences in the accounting treatment of smart meter costs by suppliers may drive differences in observed within year costs. Depending on accounting treatment, similar items may be treated either as long-term rental or annuitized costs spread over the life of assets (as is the case for our meter assets) or as one-off expenses (as is the case for our IHDs). Given the difference in annual costs driven by these two alternative accounting treatments, it would be a surprise if this didn't result in differences in reported efficiencies.

Question A10.5 Do you consider that there will be any significant change in the costs or benefits of smart metering from 2017 onwards? For example, installation costs or asset costs. Please provide evidence to support your view.

291. We do consider that there will be material changes to specific costs and benefits from 2017 onwards. In particular, Ofgem must take account of the following:

- Increasing meter rental termination costs as traditional meters can no longer be redeployed,
- Increasing supplier marketing costs associated with declining conversion rates for channel sales activity as customers become harder to reach,
 - In its recent open letter Ofgem specifically called out the importance of suppliers engaging customers, asked for more from suppliers in this area and recognised that this would get harder with statements reproduced below.²³

²³ Ofgem open letter, Smart Meter rollout: energy suppliers' progress and future plans, 15 May 2018.

“It is positive to see suppliers have been testing and trialling new customer engagement approaches, expanding their use of channels and gathering insight to address concerns. However, we consider that more can be done”²⁴

“Consumer engagement is crucial to the success of the rollout, and suppliers’ ability to effectively engage consumers will become ever more important as the rollout progresses and they are reaching out to more difficult to reach consumers.”²⁵

- Increasing costs of installation driven by higher cost of gas-only installations,
 - This is a particular issue for British Gas, given the number of gas only customers in our customer base;
- Additional meter testing costs driven by multiple DCC firmware releases; and
- Increasing asset costs driven by technical factors such as the deployment of 868MHz smart meters being deployed.

292. We provide further detail of the impacts that these factors are having on British Gas’ costs in Annex A.

Question A10.6 Please comment on the proposed methodology for calculating the efficient cost of rolling out a smart meter, indicating a preference with supporting rationale, on the efficiency option (average cost approach, pure frontier cost approach, lower quartile approach).

293. It is difficult to comment on Ofgem’s approach given the lack of information provided. However, we are concerned that Ofgem does not appear to have taken any account of the different stages that companies are at in terms of the progression of the rollout as part of its proposed efficiency assessment. As provided in evidence we have previously submitted,²⁶ the net costs of smart metering will be driven both by the number of installations a year and the stock of smart metering assets. Adjustments for differences in these metrics will need to be undertaken prior to carrying out any efficiency assessment.

294. Instead, Ofgem appears to undertake a comparison of smart metering costs per customer (with customers being defined as the total customers of a supplier, not the number of smart customers or the number of customers that received a smart meter in the year of analysis). Therefore, any supplier that (relative to the size of its customer base) is further ahead in the rollout (with a bigger stock of more expensive smart meters) or has installed a greater number of smart meters in the year in which Ofgem undertakes the comparison, is likely to have higher costs per customer. We would therefore expect Ofgem’s analysis to be biased towards identifying suppliers with low stock/annual installs as having “efficient” costs, and the efficient costs will be set at a lower level than is appropriate, assuming that Ofgem is setting the baseline to reflect an average industry rollout profile.

²⁴ Page 2 of Ofgem’s open letter

²⁵ Page 3 of Ofgem’s open letter

²⁶ Frontier Economics (2018).

295. We expect that this will be an issue even if Ofgem is only considering data from the six largest suppliers. However, it is likely to be even more of an issue if smaller supplier data is also included.
296. Ofgem will therefore need to adjust for stage of roll out and number of installations prior to undertaking any analysis. It could do this by taking a cross-sectional dataset with each supplier's smart costs in 2017, meters installed that year, and meters operated that year. This would then be amenable to the usual sorts of efficiency benchmarking used by Ofgem as part of its benchmarking of costs in other price control processes.
297. In terms of the methodology that is then used to determine an efficient level of costs (e.g. average cost approach through to pure frontier) we refer to our answers in Appendix 8 in relation to operating cost benchmarking.

Question A10.7: Do you agree with our approach to updating smart costs? In particular, our intention to specifically index smart cost changes, based on net cost analysis (option 3), and whether any other approaches would be preferable to option 3.

298. We agree that it would be inappropriate to have no specific updating approach for smart metering costs, for the reasons set out in our answer to QA10.1. However, we consider that option 2 (periodic cost assessments) or a different version of option 3 (specific smart indexation) would also be plausible options. Our previous submission²⁷ set out the ways in which either of these mechanisms could work. The important point is that the mechanism tracks expected movements in smart costs over time.
299. Ofgem's option 3 is a variant whereby the differences in smart metering costs over the duration of the control are set in advance. While we can see that this reduces the cost associated with updating, it is reliant on Ofgem appropriately forecasting how costs will evolve over time. This means it will need to:
- Identify changes in the unit costs associated with various line items, as we set out in our answer to question A10.5.
 - Make allowance for increases in the cost of engaging customers over time, as the rollout progresses and the price cap takes effect, as we set out in our answer to question A10.6.
 - Take appropriate account of the trajectory for smart meter installations over the course of the control. In particular, the trajectory needs to take into account factors that are outside of suppliers' control, such as when the DCC will be fully operational. Since this has changed since the 2018 supplier submissions that Ofgem is using to determine the trajectory were submitted, Ofgem will need to revisit the trajectory it is applying.
300. Should these factors vary, under Ofgem's proposed approach, there is no mechanism for adjusting the cost allowance in the cap to reflect those changes. Ofgem should remember that it will be determining the level of the smart meter costs of an efficient operator. If the allowance for smart meter costs is insufficient, the reduction in

²⁷ Frontier Economics (2018).

investment would be inconsistent with the requirement in the Bill that the cap must be removeable with reference to the progress of smart rollout.

301. If Ofgem’s current proposal for “specific smart indexation based on net cost analysis” is adopted, the same approach would apply whether a bottom up or a reference price approach is taken. In other words:
- An adjustment would need to be made to the baseline estimate of operating costs to reflect the estimate for smart metering costs in 2017.
 - The SMNCC would be converted to a £X uplift/reduction for each fuel against this baseline.
 - The SMNCC would then be applied, and this would be the same regardless of the methodology used to set operating costs.
302. We are unclear from the consultation document how the costs Ofgem identifies as “pass-through” costs will be treated in the updating process. We note that Ofgem has since published the draft licence conditions for how it may implement the default tariff cap, and its initial view of the annexes to the licence condition, including the SMNCC annex. We will comment further on this issue when we respond to that consultation.

Annex A: Smart metering costs

303. British Gas is the supplier that is most advanced in its smart meter roll out among the six large suppliers who have been operating in the market since liberalisation. This provides us with experience of the impact of increasing penetration levels on smart meter costs, particularly in the context of a customer base that requires active engagement to achieve the roll out. This means that our experience of relevant smart meter costs and their likely evolution over the coming years should be given due regard by Ofgem. In relation to many of the costs we discuss, we are likely to provide the best source of evidence within the industry.
304. Below we provide details on a number of areas of British Gas' smart meter costs both historical and forecast. This information is provided to help Ofgem to understand the materiality of some cost lines and how these can be expected to evolve over time.

✂

Appendix 11: Headroom

327. Ofgem indicated in the industry workshop on 12 June that there are two distinct purposes for headroom when setting the cap: (1) to account for differences in efficient costs, errors and uncertainty when setting efficient costs; and (2) to maintain incentives for customers to switch and enable suppliers to compete effectively. We agree with Ofgem's characterisation of the two types of headroom. We refer to the former as "cost headroom", and the latter as "competitive headroom".
328. We consider that clauses 1(6)(b) and 1(6)(c) of the Bill impose a duty on Ofgem to provide "competitive" headroom (see paragraphs 26-30 of the Legal Annex). If there were no competitive headroom then the main driver of price differentials and incentives to switch would be the exemption of smaller suppliers from the costs of the Energy Company Obligation (ECO) and Warm Home Discount (WHD). An efficient supplier which is fully obligated and operating in steady state would not be able to compete effectively if there were no competitive headroom.
329. Competitive headroom for the default cap should be set substantially higher than the headroom in the PPM cap, in part because of the different reasons for imposing each of the caps. The CMA introduced the price cap for PPM customers because of technical limitations with PPMs which presented barriers to competition. The rationale for the default cap is that customers are able to engage but do not. Therefore, ensuring that there are price differentials that maintain incentives for customers to engage is a more important consideration when setting the default tariff cap than was the case for the PPM cap.
330. Ofgem should give considerable weight to clauses 1(6)(b) and 1(6)(c) of the Bill. As explained in our cover letter and in paragraphs 37-41 of the Legal Annex, clauses 1(6)(a) – 1(6)(d) of the Bill are not in conflict with protecting consumers and are essential means of protecting consumers over the long term. Acting with similar duties, the CMA chose not to implement a cap on default tariffs at any level because it unduly risked "undermining the competitive process, potentially resulting in worse outcomes for customers in the long run, through a combination of reducing the incentives of suppliers to compete and reducing the incentives of customers to engage".
331. To inform Ofgem's further analysis on this subject, we have submitted clear and consistent empirical evidence from a number of sources that once the level of price dispersion falls below £250, customer engagement and switching rates will begin to decline precipitously, which would significantly undermine the scope for effective competition. Therefore, given that sections 1(6)(a) to (d) of the Bill are intended to work together in harmony, only by setting headroom at a level consistent with a level of price dispersion that maintains customer engagement and switching rates can Ofgem satisfy the entire requirement of section 1(6) of the Bill.

Question A11.1: What are your views on headroom being a percentage? Do you think it should be applied to all cost components except for network cost? Alternatively, do you think headroom should be applied as a percentage to only controllable costs?

332. As explained in our response to Question 11, what Appendix 11 refers to as “headroom” appears to be serving two very distinct roles.
- First, “competitive headroom”, which is required to provide sufficient space for competition and maintain switching levels.
 - Second, “cost headroom”, which may be added to account for uncertainties, errors and variations in the level of efficient costs that are not accounted for elsewhere in the cap design.
333. These two types of headroom are entirely distinct, though Appendix 11 makes no mention of this. It is not a given that what aspect of cap design works for one form of headroom will work for the other.
334. In practice, however, we believe that both cost headroom and competitive headroom should scale with consumption, and therefore be set in percentage terms. Setting headroom in absolute terms would, in effect, be equivalent to applying the headroom to the standing charge. Depending on how tightly the cap binds, this could force suppliers to change the structure of their charges in such a way that low-consumption customers would be worse off than high-consumption customers. In the absence of a good reason for bringing about such distributional effects on customers, we would support Ofgem’s proposal for the headroom to be a percentage.
335. Ofgem has asked whether headroom should be set as a percentage of only controllable costs. “Cost headroom” is required to compensate for any uncertain costs – which, as Ofgem indicates, will include uncontrollable costs. It is therefore appropriate for “costs headroom” to apply to all cost components excluding network charges. “Competitive headroom” reflects the switching costs faced by customers. These will certainly not depend on which parts of the total bill represent controllable costs (since this is not observed by customers). In the absence of further evidence, and to avoid over-complication, scaling “competitive headroom” in line with all costs excluding network charges may be appropriate.

Question A11.2: What are your views on whether we should change the level of headroom over time?

336. As described above, the aim of “competitive headroom” is to ensure customers continue to face incentives to switch tariff and supplier. This is explained further in paragraphs 47-53 of the Legal Annex. Given the risk of the cap being perceived as a “safe haven”, we do not consider that headroom should be reduced over time. There is a case that it should be increased if it turns out that there is a material decline in switching after the introduction of the cap.
337. The aim of “cost headroom” is to account for uncertainties, errors and variations in the level of efficient costs that are not accounted for elsewhere in the cap design. Given Ofgem is not proposing to re-estimate the level of the cap in the future, these will remain

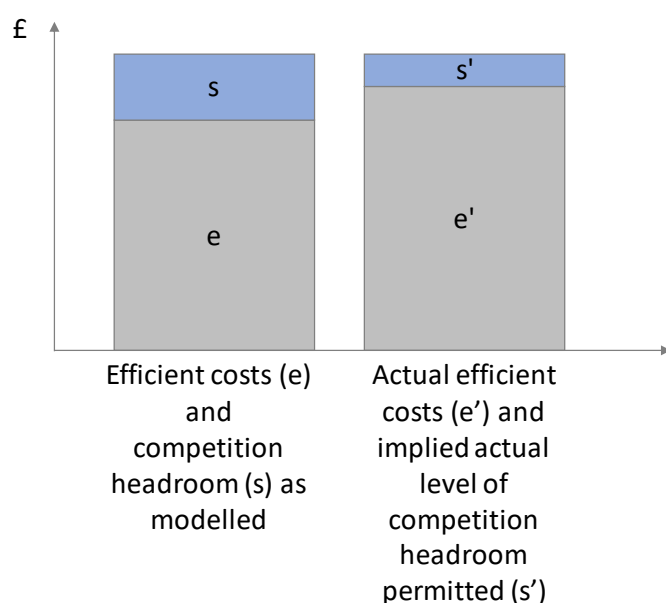
throughout the lifetime of the cap. There is therefore no justification for reducing headroom.

338. We agree with Ofgem that the use of decreasing headroom as an efficiency “ratchet” would be inappropriate. Please refer to our response to question A8.9 for why this would be the case.

Question A11.3: Bearing in mind the analysis and scenarios presented, what are your views on the appropriate level of headroom to include in the default tariff cap?

339. Ofgem’s use of headroom appears to conflate two purposes: “Competitive headroom” to maintain incentives for consumers to switch and suppliers to compete; and “costs headroom” to account for uncertainties, errors and variations in the level of efficient costs that are not accounted for elsewhere in the cap design. The level of these forms of headroom must be assessed independently: additional headroom for one purpose cannot compensate for reduced headroom for the other.
340. To give an example, suppose that Ofgem sets the cap in line with an expectation of efficient costs at a given consumption level of e pounds, and added a further s pounds of competitive headroom to ensure sufficient incentives to switch.
341. The risk is that, if e is too low, efficient suppliers will be unable to finance their activities. It is not sufficient for Ofgem to argue that the competitive headroom s would compensate for this. As the diagram below illustrates, this is because in the event efficient costs were in fact e' , the actual headroom available to suppliers would be s' . If s had been set at the lowest level required to maintain customers’ incentives to switch, this would mean that the cap would be set at too low a level to achieve this, contradicting one of the matters that Ofgem is statutorily obliged to have regard to. Any further allowance for costs headroom must therefore be in addition to competitive headroom.

Figure 4. Stylised illustration of the need to have separate competitive headroom and cost headroom allowances



342. Ofgem therefore needs to set “competitive headroom” at or above the minimum level required to support effective competition (by allowing sufficient space for the price differentials required to maintain customers’ incentives to switch), and “costs headroom” at or above the minimum level that ensures efficient suppliers are able to finance their operations. Beyond this, Ofgem’s selection of tariff cap design should be informed by a robust impact assessment. We discuss what this would need to contain in our response to the questions in Appendix 14.

Setting the appropriate level of “competitive headroom”

343. As noted above – and explained in response to Question 2 of the Consultation Document – an allowance for “competitive” headroom within Ofgem’s methodology for determining the cap will be critical if Ofgem is to meet key requirements set out in the Bill, which are that Ofgem’s methodology must:

- set the cap “at a level that enables holders of supply licences to compete effectively for domestic supply contracts”; and
- maintain “incentives for domestic customers to switch to different domestic supply contracts”.

344. In the absence of a separate competitive headroom allowance over and above the estimated efficient costs that suppliers incur in supplying default tariff customers, domestic tariffs across the market will converge on the level of the cap. This is because an efficient supplier would not be able to sustain prices below the level of the cap, and would be prevented from pricing at any higher price level by the cap itself.

345. Effective competition could not be sustained in such an environment, because customers would correctly perceive that they would have little to gain financially from shopping around for deals, which would strongly disincentivise them from engaging in the market. The role of competitive headroom is to create enough space to support the level of price dispersion required to maintain customers’ incentives to consider shopping around for a better deal. In this respect, setting an appropriate allowance for headroom is a key differentiator between a retail price “cap”, and a direct price control, such as would be set for a network monopolist.

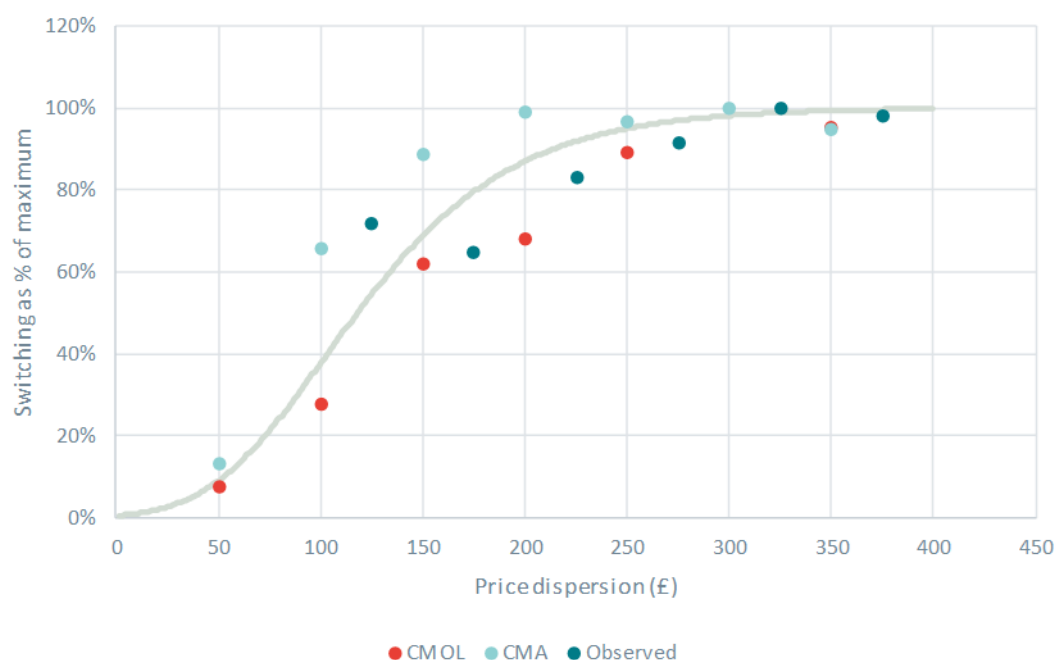
346. Since the Bill explicitly requires Ofgem to maintain consumers’ incentives to switch, there is a clear legal imperative – as well as a strong logical rationale – to build a competitive headroom allowance of this nature into the cap. As we have set out in the Legal Annex, clause 1(6)(a) to (d) are intended to work together in harmony, not collision, and to be reconcilable. To achieve this Ofgem must establish whether – and if so how far – existing levels of price dispersion can be reduced whilst maintaining customers’ incentives to engage in the market and switch supplier, and then calibrate the competitive headroom allowance with a view to facilitating at least this threshold level of price dispersion. This will recognise that there will not be a one-for-one relationship between the required level of price dispersion and the level of competitive headroom required to support this price dispersion.

347. We shared an in-depth analysis of this relationship between headroom and price dispersion with Ofgem in our response to Working Paper 3. This considered the available empirical evidence on this question from a range of sources, including:

- the survey that the CMA commissioned from GfK NOP during the Energy Market Investigation, which – amongst other things – asked customers about the minimum price differential required to encourage them to switch energy supplier;
- the CMOL trial, undertaken on behalf of Ofgem by British Gas and another supplier, which provided evidence on the effect of varying price differentials on customer switching; and
- market data on the relationship between price dispersion and switching rates.

348. The evidence we have collected suggests that there is clear and consistent empirical evidence from a number of sources that once the level of price dispersion falls below £250, customer engagement and switching rates will begin to decline precipitously, which would significantly undermine the scope for effective competition in the industry. This can be seen from the chart below, which synthesises the CMA, CMOL and market data evidence that we discussed in our Working Paper 3 response. The chart plots the relationship between price differentials and the switching rate (presented as a percentage of the maximum switching rates observed or reported in the relevant study). Transforming the data in this way is necessary because the studies measured switching in different ways (e.g. market data focuses on actual switching rates, whereas the CMA's survey asked respondents about their willingness to consider switching). We consider that standardising the measures of switching in this way to be the most sensible way of combining the information from the different sources, for the purposes of exploring the relationship changes in price differentials and changes in switching behaviour.

Figure 5. Analysis of the relationship between price differentials and switching, combining evidence from the CMA, CMOL and market data.



Source: Centrica analysis – for further information on each of the three studies underpinning this analysis, please refer to our response to Working Paper 3.

349. The chart above provides two important insights:

- First, switching declines steeply once price differentials fall below £250.
 - Second, these results are clear-cut, not only because that the overall fit of the combined data set is good, but also because the fit is good for each of the three empirical studies underpinning the analysis (i.e. the CMA's survey, CMOL and observed market behaviour). In other words, these findings of these studies reinforce one another rather than pointing to different conclusions.
350. These results do not necessarily imply that competitive headroom must be set at the same level as price dispersion: as noted in Appendix 14, headroom for default tariffs can give suppliers an incentive to reduce their non-default tariffs. This means that a £1 increase in headroom may correspond to a greater-than-£1 increase in price differentials. Ofgem therefore needs to assess quantitatively the impact a given headroom will have on price dispersion. Based on our analysis (and without prejudging the exact level of headroom required to meet the Bill's requirements, we certainly cannot see how Ofgem can set headroom at a level that provides price dispersion of less than £250 and satisfy the entire requirement of section 1(6) of the Bill.
351. In Table A11.1 of its headroom appendix, Ofgem has presented four scenarios mapping the relationship between headroom and price differential. However it is entirely unclear how Ofgem has modelled these (or whether they are purely illustrative). In paragraph 3.20 of the headroom appendix, Ofgem provides basic details of a model that it is developing, but there is insufficient detail for us to comment on its appropriateness. We therefore request that Ofgem makes further details of this analysis available for comment.

Setting the appropriate level of “costs” headroom

352. The appropriate level of “costs” headroom will depend on the uncertainties and variation inherent in Ofgem's estimates of efficient costs. It is not possible for us to suggest a single “appropriate” level in the absence of knowing what decisions Ofgem intends to take elsewhere in the cap design.
353. Where uncertainties and variation do exist, it would be preferable for them to be accounted for specifically, rather than included a “catch-all” headroom adjustment.

Appendix 12: Payment method uplifts

354. The extra costs of supplying customers who pay by standard credit should be recovered from customers who pay by standard credit.
355. If the extra costs of paying by standard credit are partially socialised, then it would:
- Reduce the incentive for standard credit customers to switch to direct debit, increasing costs for all customers and disproportionately for those suppliers with more standard credit customers;
 - Give a competitive advantage to those suppliers with a greater proportion of direct debit customers than the split assumes; and
 - Mean that those suppliers who are efficient but have a greater proportion of standard credit customers than the split assumes cannot finance their activities.
356. Customers who pay by standard credit on FTCs may choose the socialised costs of the default tariff over more cost reflective FTC rates, again further exacerbating the problem for suppliers with a greater proportion of customers who pay by standard credit.
357. We disagree that a customer who pays on time by standard credit should cover the same bad debt costs as a direct debit customer. In a competitive market, a group of customers that are on average more costly to serve will face higher prices. In any case, a customer who has set up a recurring direct debit will clearly be less likely to miss payments than a customer who is required to make an ad-hoc payment by cash/cheque. The lower risk should be reflected in the rates they pay and lower risk behaviour encouraged.
358. There is nothing in the Bill that supports socialisation. Socialisation of some or part of the extra costs would go against the requirements in the Bill to incentivise efficiency, ensuring suppliers can compete effectively and finance their activities. Ofgem may argue that some costs are socialised today, but this may be in part caused by Ofgem's licence condition that requires that any price differentials need to be fully justified (with the resulting regulatory risk creating a bias towards socialisation).

Question A12.1: Do you agree with our proposed methodology for allocating additional costs between standard credit and direct debit customers?

359. We agree that a payment method differential is required to account for the higher costs of serving standard credit customers over direct debit customers. Suppliers should be able to fully recover the extra costs of supplying customers who pay by standard credit. Under Ofgem's proposal, which socialises a large proportion of the cost differential, those suppliers which have a higher percentage of standard credit customers than Ofgem's proposed split assumes will not be permitted to recover their efficiently incurred costs. Ofgem's current proposal will therefore contravene clause 1(6)(d) of the Bill, as well as giving a competitive advantage to those suppliers with a greater proportion of direct debit customers than the split assumes. Furthermore (and as described in further detail below), the socialisation will blunt incentives for consumers to choose more cost-effective payment methods, and to choose FTCs over SVTs and other default tariffs.

360. To address this issue, Ofgem should ensure that the payment method differential is set in a cost-reflective fashion. As described below, this will require fully allocating the payment method differential (i.e. carrying out no socialisation).
361. Without prejudice to the above, if Ofgem does choose to socialise any element of the payment method differential, the socialisation will need to be carried out in such a way that the supplier with the highest proportion of standard credit customers is still able to cover the costs of these customers (to avoid a detrimental impact on competition).
362. In addition, if Ofgem is socialising elements of the payment method differential, it should consider whether these should be recovered through the standing charge or unit rate in the price cap. Specifically we believe that those additional costs that relate to bad debt should be recovered through the unit rate of the tariff as these are related to the level of consumption of customers. Those parts of the payment method differential that do not relate to debt (such as customer contact and administrative costs) do not generally scale with consumption and should therefore be recovered in the standing charge.
363. Ofgem has stated²⁸ that current price differentials are below the level implied by no socialisation. However, suppliers (including British Gas) have typically adopted a conservative approach to payment method differentials. This is due to the regulatory risk regarding SLC 27.2A: Ofgem's guidance has been that while it expects any price differences, if applicable, to be robustly justified, it does not require suppliers to apply any price differential by payment type where underlying costs differ.
364. The current level of price differentials is irrelevant to the question of whether suppliers are able to recover efficiency incurred costs. The price cap must be set in a way which permits suppliers with a higher proportion of standard credit customers to recover those costs. This requires taking the full payment method differential into account. A failure to allow for the higher costs of suppliers with a greater proportion of standard credit customers would contravene the provisions of the Bill.
365. Additionally, Ofgem's observation of a £55 differential on average (£77 for the six largest suppliers) appears out of date given the prices currently in the market. The table below shows yearly bills for a number of suppliers'²⁹ SVTs, at medium TDCV, as of 20th June 2018. The average differential across the six largest suppliers is £90. While the average differential across the entire range of suppliers is £54, this includes a large numbers of suppliers with zero differential, which is clearly not cost-reflective. Including only suppliers with a payment differential of some level, the average is £82.

Table 10. Payment method differentials currently in the market

Supplier	Plan	Average price DD	Average price SC	Difference
British Gas	Standard	£1,161	£1,247	£85
E.ON	E.ON Energy Plan	£1,208	£1,299	£90
EDF Energy	Standard (Variable)	£1,157	£1,248	£90

²⁸ Appendix 12 para 3.19

²⁹ Data is from USwitch, which does not gather this data for Ovo and First Utility.

npower	Standard SC	£1,230	£1,325	£95
ScottishPower	Standard	£1,211	£1,311	£100
SSE	Standard	£1,196	£1,276	£80
Average of 6 largest suppliers		£1,194	£1,284	£90
Bristol Energy	Bristol Energy 1 Year Fix	£1,043	£1148	£105
Co-operative Energy	Green Pioneer	£1,158	£1221	£63
Ecotricity	Green Electricity + Green Gas	£1,258	£1258	£0
EnergySW	EnergySW Variable	£1,183	£1183	£0
ENGIE	Safe And Easy	£1,038	£1102	£64
Extra Energy	Bright Fixed Price	£9,84	£1089	£105
FairerPower	Fairerpower Variable	£1,153	£1153	£0
Good Energy	Good Energy & Gas+	£1,249	£1249	£0
Green Star Energy	Rate Watch	£1,038	£1106	£68
Peterborough Energy	Peterborough Energy Variable	£1,131	£1131	£0
Robin Hood Energy	Robin Hood Energy Evergreen	£1,039	£1087	£48
Southend Energy	Southend Energy Variable	£1,140	£1140	£0
Utilita	Smart Energy	£1,068	£1068	£0
Utility Warehouse	Value	£1,175	£1253	£78
Average of all suppliers in table		£1,141	£ 1,195	£54

The rationale for no socialisation of payment method differentials

366. The correct approach to setting the payment method differential is one that ensures the true marginal costs of taking on a new customer can be recovered. In other words, the price differential must be cost-reflective. This ensures that the price cap is set at a level consistent with a competitive outcome. It also reduces the possibility of a number of unintended consequences (many of which are already outlined by Ofgem in paragraph 2.30 onwards – and conflict with the matters the Bill requires Ofgem to give consideration

to) should the payment differential be set too low. If the extra costs of paying by standard credit are partially socialised, then it would:

- Reduce the incentive for standard credit customers to switch to direct debit, increasing costs for all customers and disproportionately for those suppliers with more standard credit customers.
- Give a competitive advantage to those suppliers with a greater proportion of direct debit customers than the split assumes.
- Mean that those suppliers who are efficient but have a greater proportion of standard credit customers than the split assumes cannot finance their activities.
- Customers who pay by standard credit on FTCs may choose the socialised costs of the default tariff over more cost reflective FTCs. For customers with a higher proportion of customers paying by standard credit, this would exacerbate the issues described above, and potentially reduce the incentive of customers to switch to FTCs.

367. As explained below, a cost-reflective price differential would include a full allocation of bad debt, working capital, and other administrative cost differentials. Ofgem's preferred option (3b) is not fully cost-reflective, and is therefore likely to lead to the adverse consequences noted above.

368. Some stakeholders have argued that a differential that is not cost-reflective may be justified since standard credit customers may be more likely to be vulnerable. We agree with Ofgem's view that this would be inappropriate. As Ofgem notes, payment method is only a weak proxy for vulnerability. Should Ofgem wish to provide additional help for vulnerable customers as part of its more general duties, this should be done in a much more targeted way as part of a separate process.

Bad debt

369. The appendix states that it is not reasonable to allocate the additional cost of bad debt exclusively to standard credit customers, since *"...this would mean standard credit customers who have paid their bills are treated as responsible for covering the cost of standard credit customers who have not paid their bills."* It states that *"We do not believe sharing a payment method makes them any more responsible for that debt, than a direct debit customer is. The propensity to default on debt is a characteristic of the customers and not a necessary feature of the payment method."*

370. In a competitive market, a group of customers that are on average more costly to serve will face higher prices. This dynamic is seen in many markets. For example, car insurers price their products on the basis of the observed risk of a class of customers, and so some groups (e.g. younger drivers) will face higher premia. While some younger drivers may be extremely low-risk, insurance companies cannot observe this, and so these drivers also face the higher premia. Insurers have neither the available data, nor the role, to judge whether specific drivers are "responsible" for the risks of others in their group.

371. In the energy market, suppliers are able to observe (and set prices on the basis of) payment method. They are not able to observe all the underlying factors leading to a likelihood of bad debt – and even if they could, price discrimination of this nature would be impractical. The additional bad debt costs therefore feed through to prices in a competitive market.

372. This logic would apply even if there was no causal link from payment method to probability of default. However, a customer who has set up a recurring direct debit will clearly be less likely to miss payments than a customer who is required to make an ad-hoc payment by cash/check. At least a proportion of the bad debt differential therefore is driven directly by the payment method.

Working capital

373. We agree with Ofgem's view that there is no justification for socialising the costs of working capital, since this cost is inherent to the choice of payment method.

374. As discussed above, the way in which vulnerable customers disproportionately use standard credit does *not* constitute a reason to socialise these costs.

Other administrative costs

375. Ofgem has argued that other administrative costs should be socialised, on the grounds that:

- These administrative costs include expenses associated with bad debt, which should be socialised on the same basis of bad debt itself;
- the other costs relate to services such as call centres, the costs of which are not inherent to the payment type; and
- while some administrative costs may be better allocated to standard credit customers, suppliers' data is not sufficiently granular or comparable to split these costs in a robust way to allow for assessment of the materiality of the issue.

376. Regarding this final point, Ofgem's February RFI asked for a breakdown of the cost differential by elements such as call centres, billing, or collection. British Gas's response to Ofgem's February RFI broke down our other administrative costs differential (of £X) into a number of components: customer services and support (X% of the differential), credit and collections (X% of the differential), and print centre costs (X% of the differential). This level of granularity closely matched the data requested by Ofgem, and should be sufficient for Ofgem to understand the main components of the administrative cost differential. It is therefore unclear why Ofgem does not believe it is in a position to split out these costs. Ofgem needs to state:

- Whether it believes the questions it asked during the February RFI were insufficiently granular and why (in which case it needs to request more detailed information); or
- whether some suppliers were unable to produce data to the same level of granularity as British Gas (in which case, if it is infeasible, Ofgem could still use the data from the suppliers that can extract the data to come to a reasonable view of administrative cost differentials, given the similarities across suppliers).

377. Ofgem has a clear obligation "to equip [it]self with the information necessary to take an informed decision".³⁰ There is also a duty on Ofgem to consider and grapple with the materials it receives (the duty of conscious consideration).³¹ Further, the Tameside Duty³² means that a failure by Ofgem to acquaint itself with the relevant information so

³⁰ *R (DF) v Chief Constable of Norfolk Police* [2002] EWHC 1738 [Admin] para 45.

³¹ *R v Secretary of State for the Home Department, ex p Iyadurai* [1998] Imm AR 470, para 475 (Lord Woolf MR); *R v Lambeth London Borough Council, ex p K* [2000] 3 CCLR 141 para 149H.

³² *Secretary of State for Education and Science v Tameside Metropolitan Borough Council* [1977] AC 1014 para 1065B.

as to enable itself to answer the question, would leave itself open to a claim for breach of this common law duty. It is therefore incumbent on Ofgem to allow sufficient time to gather and fully acquaint itself with that information, in order to make the best decision possible in the circumstances. If other suppliers are unable to provide evidence, Ofgem cannot simply opt to not take account of the information provided by British Gas (and potentially other suppliers).

Customer services and support

378. As described above in relation to bad debt, failing to account for the price differential relating to payment method could result in a number of adverse consequences.
379. In any event, the majority of the differential in administrative costs can be traced directly to the choice of payment method. We have examined the categories of inbound calls made by direct debit and standard credit customers. The chart below shows the average propensity for each type of credit customer to call, for each reason. This shows how the majority of the increase in calls for SC over DD customers is due to call types that are specifically linked to billing and payments (this is a conservative estimate, as some of the moving home calls will relate to the settling of credit or debit balances on account closure when moving home). This is strong evidence that the uplift in calls for standard credit customers is an intrinsic property of the payment method, rather than the result of a correlation with some customer characteristic.

✂

Credit and collections

380. We agree with Ofgem that credit and collection costs should be treated in the same way as bad debt costs, since they are costs that necessarily arise in the course of attempting to collect bad debt.

Print centre costs

381. Customers paying by standard credit necessarily incur additional print costs (in our response to the vulnerable customer RFI in February, we calculated the differential of £✂ per year per dual fuel customer). These extra costs are directly linked to the extra volume of letters that need to be produced for these customers. For example, while standard credit customers receive four bills per year (given the quarterly billing period), direct debit customers would typically only receive two statements per year. All additional print centre costs should therefore be allocated directly to standard credit customers, and not socialised.

Question A12.2: Do you agree with our proposed methodology for calculating the additional costs to serve and the socialisation level?

382. Ofgem's use of an RFI to quantify the cost to serve differential appears to be a reasonable approach. However, the socialisation level is insufficient for suppliers with a high proportion of standard credit customers to cover their cost to serve. In addition, the benchmarking Ofgem has carried out is inappropriate, and Ofgem should take account the fact that the lack of a full allocation of overheads is likely to mean suppliers' responses understate some elements of the cost differential.

Socialisation level

383. As explained above, the use of socialisation for the payment method differential is inappropriate.
384. Nevertheless, if Ofgem were to socialise costs, it would be required by the bill to do so on a basis which means that all suppliers are able to compete effectively. With socialisation of payment method differentials, suppliers with a higher proportion of standard credit customers than Ofgem's assumption of 35% will not be able to cover their costs for these customers. If socialisation is carried out, it will therefore need to be done on the basis of the supplier with the highest proportion of standard credit customers.

Benchmarking of the payment method differential

385. Ofgem is proposing to take the lower quartile of payment method differentials for each of the three components of the differential (bad debt costs, working capital, and administrative costs). Ofgem's justification (in para 3.17) is that this is to select an efficient differential. However, a low payment method cost differential could equally be due to a supplier having a particularly high cost to serve direct debit customers, as having a low cost to serve standard credit customers. It is therefore not possible to say that a low differential equates to efficiency.
386. Moreover, Ofgem's separate calculation of lower quartiles for three categories of payment method differential – in addition the general benchmarking of costs it intends to undertake for the rest of the price cap³³ – contradicts the reasoning given in Appendix 8 for carrying out benchmarking at the level of total costs (that there may be substitutability between categories of expenditure, or differences in cost allocations).
387. These issues will be apparent for any form of price cap. They will be particularly pertinent if Ofgem chooses a cap methodology based on the cost of direct debit tariffs (for example, if Ofgem used Option 3, and selected a benchmark of suppliers with low direct debit tariffs). By definition these suppliers will have particularly low direct debit tariffs and so might, if anything, have higher payment method differentials. By taking a low benchmark of both DD tariffs and a SC uplift, the resulting SC price cap may be unobtainable even for an efficient supplier.
388. Given these issues, the sample mean or median of payment method differentials would be a more appropriate benchmark to use.

Issues with allocating overheads

389. Given time and data constraints, it is likely that suppliers will not have been able to disentangle relevant overheads from their accounts when answering the February RFI. For example, a higher level of customer contact will drive up costs such as HR and IT, which are unlikely to be fully reflected in the figures returned to Ofgem.
390. We estimate that ~~§~~ of the £~~§~~m of central overheads identified for 2018 in our response to Ofgem's historic cost RFI can be allocated to contact centres:

³³ Whether benchmarking of costs under option 4, or a selection of "competitive" tariffs as part of option 2 or 3.

- £Xm of this relates to real estate and facilities management costs. This figure has been derived by considering the main use of each of our offices. A significant change in the volume of customer contact required would lead to a change in our office space requirements.
 - £Xm relates to IT costs. These are primarily costs such as software licences and desktop computer provision and support, which vary directly with the number of employees.
 - Another £Xm relates to HR costs. A significant change in the number of employees would have a direct effect on costs such as training and rewards.
391. Allocating these costs in line with the costs identified in the February RFI, the admin method differential (for gas and electricity combined) would increase from the £X previously identified to £X.
392. We acknowledge that it will be difficult for many suppliers to fully allocate overheads, let alone in a consistent way. However, it is important that Ofgem's overall approach to setting the payment method differential takes into account the potential under-statement of the differential that may result.

Appendix 13: Renewable tariff exemption

Question A13.1: Do you agree with our minded-to positions not to provide exemptions for renewable electricity or gas tariffs?

- 393. We agree with Ofgem's starting point that there should be no exemptions unless there is sufficient evidence to suggest otherwise.
- 394. We agree that any exemption framework should only capture tariffs that demonstrably and materially support investment in new renewable energy beyond Government policies, and cost materially more than costs allowed under the default cap.
- 395. Ofgem is sceptical that there are any tariffs that could meet these two criteria. We do not have evidence readily available which suggests that it is likely the criteria will be met, although this does not mean that such evidence does not exist.

Question A13.2: What are your views on whether to provide a derogation for renewable electricity tariffs?

- 396. If there is insufficient evidence to support an exemptions framework, then we agree that creating the ability to provide derogations is sensible. A derogations framework will allow Ofgem to respond faster to new evidence than having to reconsult on the exemptions framework.
- 397. If Ofgem does pursue the derogations framework, it should take great care to ensure that its decisions are transparent and consistent. All suppliers who apply for a derogation should get equal treatment, and transparency should enable suppliers to make informed commercial decisions.

Appendix 14: Impact assessment

398. Appendix 14 includes only an “initial view” on the impact assessment. Given the stage at which the impact assessment currently is, and the timescale under which Ofgem is planning to implement the price cap, it is clear that the impact assessment will have little prospect of affecting Ofgem’s decision-making. It is therefore vital that Ofgem revises its timetable and process, and in doing so provides a real opportunity for stakeholders to comment on the impact assessment itself. These concerns are addressed in more detail in Part A of the Legal Annex.
399. There are also a large number of areas where, based on the detail currently available, we are concerned that the proposed analysis will not be sufficiently robust to underpin what is an extremely significant regulatory intervention. Most significantly, the proposed analysis regarding effects on competition falls well short of what we would expect to see for such a policy (and indeed is not compatible with the CMA’s Competition Impact Assessment Guidelines). The proposed analysis also fails to quantify a number of impacts (such as on the wholesale market or PCW sector) which – given sufficient analysis – should be amenable to quantification by Ofgem.

Question A14.1: What is your view on the overarching approach that is proposed for conducting the impact assessment? In particular, on the scope of the assessment, and material issues that we have not referred to. Please provide details of any relevant sources of data and evidence that you think should be considered.

400. The policy consultation paper does not include a draft impact assessment, including only an “initial view”.³⁴ Instead, Ofgem states that:
- at the start of October, “draft numbers for the respective components of the cap will be published alongside the statutory consultation together with the draft impact assessment”,³⁵ and
 - when Ofgem publishes its final report with the input data at the end of October, it will publish its final impact assessment.³⁶
401. The policy consultation sets out Ofgem’s “initial views on our approach to conducting the impact assessment and the type of impacts that will be included”.³⁷
402. In this section we explain what Ofgem needs to do next:
- **Ofgem must revise its timetable and process** so that comments on the draft impact assessment are realistically capable of informing Ofgem’s substantive decisions about

³⁴ Appendix 14.

³⁵ Para 6.11.

³⁶ Para 6.15.

³⁷ Appendix 14, page 1.

the methodology and level of the cap, and so that there is a real opportunity for stakeholders to comment on the impact assessment;

- **significantly more detail and quantification is required** for Ofgem to move from its current “initial views” to a draft impact assessment, including providing specific, quantified costs and benefits on core considerations such as how the level of the cap impacts customer incentives to switch. This work must be done urgently;
- **issues with the substance of the impact assessment need to be addressed**, such as the assumption that the price cap is extended beyond 2020 and not fully addressing the coverage of the price cap;
- **Ofgem must provide sufficient analysis, and comply with the Ofgem guidance on impact assessments, the HMT Green Book, and the CMA’s Competition Impact Assessment Guidelines**, so as to enable suppliers to properly engage with the issues surrounding the caps impact on consumers, suppliers, and the wider market and competition.

403. We explain each of these points in more detail below. We end by concluding that Ofgem’s “initial views” are not sufficiently detailed for stakeholders to have visibility, or the ability to meaningfully comment, on how Ofgem has or will measure the impacts of its proposals. At this stage, we can only note that Ofgem’s draft impact assessment needs to ensure that a range of options are assessed and that all options must be consistent with the Bill and apply the correct statutory tests.

Ofgem must revise its proposed timetable and process

404. In this section, we explain that Ofgem’s proposed timetable and process need to be revised, so that the impact assessment process can be a meaningful input into Ofgem’s decision-making when setting the cap, and so that stakeholders have a reasonable opportunity to provide their feedback into that process.

a. Input on the impact assessment must inform Ofgem’s approach to setting the cap

405. We welcome Ofgem’s acceptance that the impacts of the cap “could be significant” and that a detailed and in-depth impact assessment is therefore required. We also welcome Ofgem providing its initial views for comment. However, Ofgem seems to have lost sight of a core aspect of impact assessments. In Ofgem’s own words:

An IA is a continuous process, informing and being informed by policies as they develop. Although it is important to have a clear structure and process for considering impacts, the nature of our decision-making often involves producing a wide range of documents, and it is important that the assessment of impacts is not done in isolation of these.³⁸

406. Ofgem’s proposed process allows little prospect of the impact assessment informing Ofgem’s decision-making. As we outline below, the policy consultation offers only the broadest parameters of how the impact assessment will be conducted – it does not give stakeholders any ability to comment on the measurement of impacts themselves. That, apparently, will only come at the start of October with the draft impact assessment.

³⁸ Ofgem Impact Assessment Guidance, p 4.

407. Ofgem has freely acknowledged that *‘starting the IA process alongside policy development maximises the opportunity for interested parties to comment on and improve the proposals’*³⁹ and therefore that *‘assessment of impacts will normally begin at an early stage of proposal development’*.⁴⁰ Ofgem explains this by saying that:

*So that our analysis is based on defensible evidence and reflects a responsive approach to proposal development, we will typically initiate an IA at an early stage of a proposal. Even though a wide range of evidence may not be available at that stage, the IA structure is a rigorous tool for examining the issues.*⁴¹

408. The impact assessment process is, clearly, still at an embryonic stage, especially given the demanding timeframe and curtailed process Ofgem has imposed on itself going forward. Ofgem has failed to engage in a meaningful and transparent way with stakeholders on the impact assessment, or the issues raised in this consultation document. Ofgem is under an administrative law duty to engage with stakeholders and acquaint itself with the right information – it must allow for a meaningful consultation process to do this. Then, once Ofgem receives responses; it should allow itself time to review, reconsider and refine its approach where necessary. Ofgem’s failure to allow time for a genuine consultation with stakeholders on the impact assessment is fundamentally wrong.

b. Ofgem must allow a reasonable period of time to comment on the draft impact assessment

409. Further, the timeframe for responding to the draft impact assessment will be unduly short. Ofgem’s own guidance states that:

*The way we consult on IAs is in line with our broader consultation policy. Consultation periods may be four, eight or 12 weeks depending on how urgent or complex it is and the level of impact and likely interest in the proposal.*⁴²

410. A price cap is a profoundly disruptive and intrusive form of regulation. It deserves the closest and most comprehensive form of consultation. As Ofgem recognises, this *‘ensures that proposal development is open to new information and ideas from outside interests. The quality of our analysis is greatly assisted by the quality of the input received’*.⁴³ Four weeks is plainly inadequate. Ofgem states that a period of four weeks will be for issues that are:

*urgent, or which represent minor changes to existing policies, or where we are working to a timescale which is constrained by a licence or other regulatory or statutory requirement, or set by a third party.*⁴⁴

411. Although the Bill requires the cap to be in place as quickly as practicable, this means ‘practicable’ in light of the need to conduct a proper process; it is not carte blanche for Ofgem to throw out its normal rules. The ‘end of the year’ timeframe may be expedient

³⁹ Ofgem Impact Assessment Guidance, para 2.4.

⁴⁰ Ofgem Impact Assessment Guidance, para 2.10.

⁴¹ Ofgem Impact Assessment Guidance, para 3.1.

⁴² Ofgem Impact Assessment Guidance, p 25.

⁴³ Ofgem Impact Assessment Guidance, para 4.1.

⁴⁴ Ofgem Impact Assessment Guidance, para 4.6.

for Ofgem to meet Government's expectations, but it is not a regulatory or statutory requirement, and Ofgem is required by law not to act at the behest of Government. A lengthier consultation period is essential.

412. Ofgem must revise its timetable and process so that there is a real opportunity for stakeholders to comment on the impact assessment, and for those comments to inform Ofgem's substantive decisions about the methodology and level of the cap.

Significant work is urgently required before a draft impact assessment can be prepared

413. In principle, we accept Ofgem's proportionate approach – i.e. the analysis of each individual impact will be proportionate to the likely scale of that impact.⁴⁵ However, in practice, retail price caps comprise the most intrusive form of regulation which (as the CMA explored thoroughly in deciding not to implement a default tariff cap) could have significant unintended consequences for the sector. A "proportionate approach" will, in this case, require a significant depth of analysis and quantification.

414. A massive leap in detail is therefore urgently required, for Ofgem to progress from its current "initial views on our approach" to a draft impact assessment, in time for stakeholders to be able to comment and for those comments to inform Ofgem's substantive approach. In large part, this appears to be the inevitable result of Ofgem's broader choices about proceeding with the cap without the type of detailed and multi-stage consultation which characterises Ofgem's other price caps. We have previously made these points to Ofgem (for example in response to working paper 1).

415. In particular, Ofgem has indicated there are multiple areas where it does not propose to undertake a quantitative analysis:

*"Where sufficient data and evidence allows, we will assess impacts quantitatively, assigning monetary values where appropriate. Our current view is that there are some areas of impact for which there is insufficient data and evidence available to allow for a proportionate and robust quantitative analysis."*⁴⁶

416. Ofgem must highlight what these areas are. Ofgem has the tools available to request and collect evidence from stakeholders, and this is exactly what it should do. It is also what Ofgem has told industry it will generally do.⁴⁷ It is unfair and disingenuous for Ofgem to refuse to issue information requests, and prepare only short, high-level working papers which stakeholders cannot respond to with detailed evidence, only then to refer its lack of detailed evidence to justify not undertaking a proper analysis.

417. Many of the areas where Ofgem may be tempted to resort to a 'qualitative' analysis are in fact core matters. For example, in assessing the impact of the cap on switching, currently Ofgem goes no further than to say that a tight cap 'could have an impact on switching: by reducing price dispersion consumers might be less likely to frequently engage in the market and make an active choice of tariff and supplier'.⁴⁸ Substantially

⁴⁵ Appendix 14, para 2.3.

⁴⁶ Appendix 14, para 2.14.

⁴⁷ The Impact Assessment Guidance says that, in quantifying costs and benefits, "We will seek data from relevant sources if we don't already hold it" (para 3.18).

⁴⁸ Appendix 14, para 2.20.

better, quantitative evidence will be required here. Switching incentives are expressly referred to in the Bill and are listed as one of just a handful of matters which Ofgem must have regard to. Furthermore, the CMA when setting the PPM cap was deeply concerned about the risk of reducing switching incentives, and the risks of reducing engagement were a key reason why the CMA decided it could not justify a default price cap. The impact assessment cannot credibly be prepared without Ofgem examining (or procuring, if necessary) quantitative evidence on this point.

418. Finally, Ofgem has given assurances that it will present specific, quantified costs and benefits “during its preparatory work”. As Ofgem will be aware, the Regulatory Policy Committee (RPC) found when it reviewed BEIS’ impact assessment of the price cap that it:

*can only assess this Impact Assessment as fit for purpose on the understanding that (a) Ofgem will present specific monetary estimates of direct cost and benefits during its preparatory work and (b) the Department will publish (or ensure that Ofgem publishes) a clear estimate of the costs and benefits once the level of the cap is known, regardless of the eventual business impact target status of the measure. The RPC has received assurances from both the Department and Ofgem that it will do so.*⁴⁹

419. The reference to “preparatory work” makes it clear that the RPC expected quantified figures to be available for genuine consultation. The need for a robust impact assessment, on which stakeholders can comment and which can in turn inform Ofgem’s substantive decisions, requires substantial further work from Ofgem and a more genuine opportunity for stakeholders to convince Ofgem to change course if necessary.

Issues with the substance of the impact assessment need to be addressed

a. Any impact assessment must not assume the price cap is extended beyond 2020

420. We firmly object to any impact assessment assuming the price cap extends to the period 2020-2023.⁵⁰ We do not think HMT’s Green Book recommendation that a policy is assessed over its ‘lifecycle’ compels Ofgem to assume that the cap will be in place for the maximum possible period that it could be.
421. The Bill clearly states that the cap is to fall away in 2020 unless it is specifically extended because the conditions for effective competition are not yet in place. Government policy is the price cap to be in place for as short a period as possible, and for competition to become effective as quickly as possible. For example, it is clearly envisaged that the completion of the smart meter rollout in 2020 will create a ‘step change’ in terms of consumer engagement.
422. It is, therefore, clearly wrong for Ofgem to assume that the cap will be in place longer than 2020. If the cap remains past this date, this will represent a clear failure of the cap,

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/683951/tariff-cap-bill-rpc-opinion.pdf p 5.

⁵⁰ Appendix 14, para 2.21.

or a clear failure of Government policy. Ofgem should not make such assumptions, which could result in extensions effectively becoming a *fait accompli*.

423. Notwithstanding the above, it will be also be important for the impact assessment to consider the impact of the cap on the market after the cap has ended (be that 2020, or between 2020 – 2023) as the presence of the cap will impact on consumer interests in both the short and longer term.

c. Coverage of the price cap

424. Ofgem makes some general observations about the potential coverage of the cap, noting for example that some suppliers (including Centrica) are moving customers off SVT tariffs. However, beyond ‘bullet point’ generalisations, there is no serious effort to quantify how much of the market will be covered by the cap, or how the design of the cap will impact its coverage (because of how suppliers will respond to the cap). Nor has Ofgem indicated how it will model suppliers’ likely responses and then quantify how this will affect coverage.

425. We would expect to promptly see an analysis by Ofgem of:

- How different options for modelling the cap may incentivise more suppliers to move their customers off default tariffs;
- How the cap may affect customers’ incentives to be moved off tariffs that are covered by the cap, to tariffs which are not covered;
- How non-covered tariffs may be affected by the cap (e.g. whether there will be price rises) and the impact this will have on customer willingness to move to non-covered tariffs; and
- The likely impact of the other policy initiatives currently being rolled out to encourage customer engagement and how these are likely to impact the extent of the market covered by the cap over its lifetime.

426. These impacts will need to be quantified against various options for setting the cap, and feed in as inputs to the overall costs and benefits of proceeding with various options.

The “initial thinking” gives stakeholders inadequate visibility of Ofgem’s view of the impacts of its proposals and the options available

427. Finally, turning to the impacts themselves, Ofgem’s thinking is currently at a very high level, and does not go beyond lists of the impacts that Ofgem would assess.

428. Given this, it is not possible to provide any informed feedback on this aspect of the “initial thinking”. At this stage, we can only say that we agree with the general categories of potential impacts identified by Ofgem. In particular, we welcome Ofgem’s commitment to examine the impact on the smart meter rollout.⁵¹ As outlined elsewhere in this submission, it is essential that the price cap facilitates the prompt rollout of smart meters by 2020, not least given the emphasis both the Bill and the CMA placed on smart meters as a key aspect of the conditions for effective competition. To the extent that the cap has a detrimental impact on customer engagement – which in turn will make the smart rollout more challenging and costly – this must also be considered fully.

⁵¹ Appendix 14, paras 4.126-4.129.

429. It is essential that the next draft of the impact assessment properly list out detailed policy options being considered by Ofgem so that the impact assessment can be a useful tool to inform Ofgem's policy decisions. Yet even at this stage, Ofgem appears to be floating options which are clearly inconsistent with the Bill or apply the wrong statutory tests. For example:

- Ofgem says that its intention is 'reducing the average default tariff customer's cost per unit of energy, relative to what it would be without the cap'. While this is a likely outcome of the cap, it is not the test that should be applied when designing the cap. The cap must be designed with a view to protecting 'current and future customers' on default tariffs as a whole and having regard to the other statutory criteria.
- In other places, Ofgem suggests that 'costs above the level of the cap could be the result of the supplier operating inefficiently, or due to the supplier facing higher efficient costs than those used to set the cap'.⁵² This appears to be in direct tension with Ofgem's duty to have regard to 'the need to ensure that holders of supply licences who operate efficiently are able to finance activities authorised by the licence'.⁵³ The Bill does not refer to 'average efficient suppliers' or 'efficient suppliers with average costs' or 'efficient suppliers with a *typical business model*'. All efficient suppliers need to be able to finance their activities. It is very difficult to see how a cap could be consistent with the Bill, if it did not allow each and every supplier to recover their efficiently incurred costs. Ofgem has incorrectly suggested that cost recovery only needs to be available to suppliers 'which face a composition of costs in line with those used to set the default tariff cap' can achieve 'normal' profits.⁵⁴ The impact assessment should not contemplate options that result in any efficient suppliers facing costs above the level of the cap.

430. Despite the lack of detail in the Appendix, we already have identified some specific areas where it is clear further analysis will be required (in addition to the competition impact assessment, described in the following section).

- **Impact on supplier pricing:** Ofgem notes that suppliers may need to increase non-default tariffs given the reduced lifetime revenue of customers. However, there is no evidence on how it intends to model this. The description of scenarios in Appendix 11 is extremely broad, and does not provide sufficient detail to see how exactly Ofgem is planning to model this.
- **Impact on supplier revenues:** No information is provided on where the key assumptions around elasticity etc will come from.
- **Impact on supplier costs:** Ofgem states that it will qualitatively assess the impact of increased uncertainty on WACC. Given the large proportion of the industry affected, this needs to be a quantitative assessment.
- **Impact on supplier profitability:** It will not be sufficient for Ofgem to state (as in paragraph 4.57) that as the cap is designed to cover the costs of efficient suppliers,

⁵² Appendix 14, paras 4.14.

⁵³ Bill s 1(6)(d).

⁵⁴ Appendix 14, paras 4.104.

they will be able to achieve normal profits. First, this needs to be demonstrated quantitatively. There is otherwise a circular argument (Ofgem would be justifying a policy on the grounds that it is intended to lead to normal profitability for firms, without ever having proven this). Second, most firms will not be operating right at the efficiency frontier, and it is equally important to show the impact on these firms, when considering the financeability of the sector as a whole. This will require modelling of individual supplier's costs and revenues, with particular attention to whether certain suppliers may have specific characteristics that mean the cap affects them more. There is no explanation of how Ofgem proposes to carry out such modelling

- **Impact on entry/exit:** Ofgem observes in paragraph 4.106 that the cap could lead to exit. However, there is no evidence on how it plans to assess this. The assertion (para 1.07) that there are “still likely to be opportunities for entry” is unfounded. Ofgem also need to compare the number of suppliers to what would happen in its counterfactual. A proper counterfactual will need to consider whether, in the absence of the cap, the number of suppliers in the market may have increased beyond what is predicted under the cap.
- **Distributional effects of the tariff cap:** While Ofgem notes that the tariff has distributional effects, it does not appear to have given thought to how it will quantify these. Given a key impact of the price cap is likely to be a redistribution from those on default tariffs to those on non-default tariffs, this is an important omission.
- **Impact on the wholesale energy market:** While Ofgem proposes to carry out a qualitative assessment of impacts on the wholesale market as part of the IA, this is an area in which quantitative analysis should be possible. To provide one example, Ofgem indicates that the way in which suppliers' may hedge in accordance with the cap could reduce the liquidity of later dated contracts in the wholesale market. We would expect Ofgem to ascertain the quantity of contracts which might be so affected, and then assess the potential adverse consequences (for example by comparing the affected volume to the changes seen following the “Secure and Promote” licence condition).
- **Impact on third party switching services:** Similarly, quantitative analysis is required on the impact on third party switching services: Default tariffs are a much higher proportion of the market than PPM. Just because these services are expanding (as indicated in paragraph 4.454) does not mean they will continue to do so under a cap. Ofgem needs to set out how it plans to gather data on these businesses and model the impact of reduced price differentials and switching on their viability and profitability.
- **Measurement of impacts:** It is unclear how Ofgem intends to use the results of the impact assessment to make a decision. Paragraph 2.19 indicates that it will consider the relative costs and benefits of each option, in addition to the extent they are aligned to the matters the draft Bill requires Ofgem to have regard to. This suggest Ofgem is considering a trade-off between the overall costs and benefits and the matters to which it must have regard. However, the matters in the draft Bill represent a hard constraint on the options that Ofgem can implement. Ofgem will need to define the conditions under which each “matter” is met. For example, as described in our response to

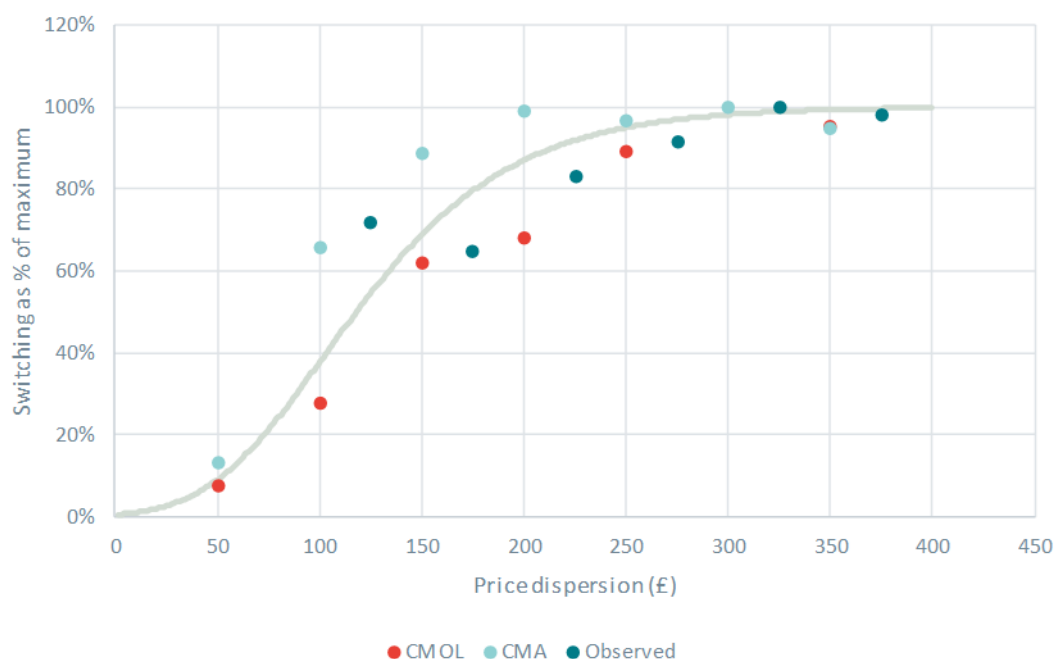
question A11.3, maintaining price dispersions of at least £250 (and without prejudging the exact level of headroom required to meet the Bill's requirements) would be a necessary (but not sufficient) condition to maintain customer incentives to switch. Ofgem must ensure that all short-listed options meet these conditions, and only then take account of the relative costs and benefits.

The impact assessment must be carried out in accordance with the relevant guidelines

431. Appendix 14 states that the impact assessment will be carried out in accordance with the Ofgem Impact Assessment Guidance and the HMT Green Book. The Green Book makes it clear that if competition effects resulting from a proposal are deemed likely, an in-depth assessment should be carried out in line with the guidance in the CMA's *Competition Impact Assessment guidelines*.
432. Appendix 14 does not refer to this document once. Given the strong likelihood of an anti-competitive effect from the price cap (as stated by Ofgem itself), this omission is of critical importance.
433. The CMA's guidelines set out four criteria, any one of which would require an in-depth competition assessment. Price ceilings are specifically listed by the CMA as the type of intervention that will require such an assessment, however the impact assessment will still need to assess whether the effect on competition will be compounded by the other criteria, which are:
- Will the measure directly or indirectly limit the number or range of suppliers? This could be the case if the price cap is set at a level which results in exit (or reduced entry) to the market. As discussed above, the proposed impact assessment fails to assess this in any level of detail.
 - Will the measure limit the ability of suppliers to compete? Price ceilings are specifically listed by the CMA as the type of intervention which will influence the ability of suppliers to compete, and the impact assessment needs to acknowledge this. In addition, the impact assessment will also need to identify whether the ability of suppliers to compete will be affected in other ways. This should include factors such as:
 - i. whether the nature of a price cap will rule out particular business models (e.g. those incurring higher costs to provide a higher quality of service); or
 - ii. whether the hedging strategy implicit in the cap will reduce the range of strategies that suppliers can take.
 - Will the measure limit suppliers' incentives to compete vigorously? As described below, the proposed impact assessment fails to consider many of the ways in which the proposed price cap could dampen competition between suppliers. At a minimum, the impact assessment will need to consider whether the following types of issues could lead to a reduction in competition between suppliers.
 - iii. By requiring firms to adopt a specific hedging strategy, the cost base of firms will become more similar.

- iv. The price cap will reduce the extent to which firms can offer a higher quality / higher cost service, potentially leading to more standardisation of service.
 - v. The way in which the design of the cap effectively mandates many aspects of tariff design (e.g. the relationship between the standing charge and unit rate) will also reduce the extent to which suppliers' tariffs can vary.
 - vi. The regular 6-month reviews will mean that price changes are frequent and predictable.
 - vii. The price cap itself may act as a "focal point". The appendix briefly mentions this possibility, however there is little to explain how Ofgem intends to analyse these issues.
- Will the measure limit the choices or information to consumers? This relates to the need to ensure sufficiently engaged consumers. While Appendix 14 describes the potential effect of the price cap on switching, the analysis is extremely high level, and paragraph 4.93 proposes a qualitative approach. This is inappropriate. Ofgem has the evidence it needs to produce a quantification of the effect on switching rates, at least in the short term.
 - In Appendix 11, Ofgem cites a variety of source for the impact of price differentials upon switching – for example, historic observations of the market, the CMOL trial, and stated preference surveys. Many of these are the same as British Gas referred to in our response to Working Paper 3. Ofgem could use these to obtain an estimate of the short-run impact of changed price differentials on switching by:
 - i. Normalising the results of all studies (which measure different outcomes) to be on the same scale. For example, expressing the switching rate for a given differential as the proportion of the highest switching rate observed in the study.
 - ii. Plotting the relationship between switching rates and differentials implied by these studies.
 - iii. Using this relationship to estimate the short-run reduction in switching that might be expected from a given reduction in price differentials.
 - We have carried out this analysis for data sources reported in our response to Working Paper 3 – the CMA's survey, the CMOL trial, and observed rates of switching in the market over time. The figure below shows how these different studies are all consistent with an "s-shaped" relationship between price differentials and switching, where switching rates fall off considerably for price differentials below around £250. We describe the implications of this type of analysis more fully in our response to Appendix 11.

Figure 6. Analysis of the relationship between price differentials and switching, combining evidence from the CMA, CMOL and market data.



- Given the central nature of the assumption made regarding the impact on switching of the policy (a reduction in switching rate is likely to generate the main cost), robust calculations are needed on both:
 - switching levels under the shortlisted policy options; and
 - switching levels under the counterfactual.

434. More generally, the proposed impact assessment recognises (in paragraph 4.88) that a negative impact on competition may in turn have a negative effect on consumers, but does not provide any evidence on how this could be quantified, and used within the impact assessment. The CMA's guidance states that "*For particularly significant or controversial issues, quantitative analysis [of the impact of proposals on competition] is preferred, when possible.*"⁵⁵ The proposed price cap is certainly significant, and yet Ofgem has not provided either a description of how it can quantify the competitive effects, or (at the very least) a detailed description of why it would not be feasible in this case.

435. The OECD's *Manual for Competition Assessment* provides one starting point that Ofgem could use for a competition assessment, since it provides quantitative evidence on how the removal of specific types of interventions, including price caps, can affect prices. We would also expect Ofgem to consider whether the experience of energy retail markets elsewhere (for example in

⁵⁵ CMA Competition Impact Assessment Guidelines, para 8.3.

Australia) can inform a judgement on the effect of switching and competition on consumer outcomes in the long-run.

Question A14.2: Do you consider that suppliers will incur a change in administration costs as a result of the default tariff cap? If so, please provide estimates with supporting evidence. Please specify whether any administration costs are fixed or variable. If variable, on what basis do these costs vary? For example, on a per customer basis.

436. The proposed price cap will mean that suppliers need to change their default tariff prices twice a year. As described below, this will be associated with a material increase in costs. Ofgem's impact assessment will need to quantify these costs. Additionally, Ofgem will need to ensure that the tariff cap itself takes account of these costs (which will not be reflected in the historic data it gathers).
437. The last four changes to the price of British Gas's default tariff occurred in April 2018, August 2017, April 2016, and September 2015. These changes have therefore occurred on average around once per year. A price cap which recalculated every six months would lead to a doubling of the administration costs associated with these price changes.
438. Notifying customers of a price change involves material costs. For the exiting safeguard tariffs, it currently costs us X a customer in printing costs to do this for the X% of customers receiving a notification by post, and X for the X% of customers receiving a notification by email – an average cost of X per customer. The default tariff cap will cover approximately Xm of our customers. One extra price notification for these customers each year would imply additional annual costs for British Gas of around £X.
439. These costs are in addition to those incurred in setting the price and proofing and producing communications materials for each type of customer affected. This is an extremely complex task, and our last price event required the production of over X variants of letter (for example, in different formats for customers with specific language or accessibility requirements). The existing safeguard tariffs force suppliers to produce these communications to an extremely tight timetable: In order to allow time for delivery of fully checked communications by the end of the month, suppliers only have three weeks in which to carry out this complex exercise. To keep to the same timetable, but for the entire customer base on default tariffs, would be impossible without increasing the size of the teams involved (and therefore our cost-to-serve).

Question A14.3: Are you aware of any unintended consequences, in the form of detrimental impacts on customers that were observed as a result of the existing safeguard tariffs? If so, please provide details of these unintended consequences.

440. A wide variety of evidence points to the safeguard tariffs already having a detrimental effect on customer switching – we summarise this in response to question A14.5. In addition, as explained below, the safeguard tariff has been associated with the exit of two suppliers from the market.

441. Ofgem has not asked for the views of stakeholders on other possible unintended consequences of the wider default tariff cap. An important consequence not covered in the Appendix relates to the implications for the smart meter roll-out if the allowance for net smart costs is set too low. We discuss this in the following section.

Effect of the existing safeguard tariffs on the viability of PPM suppliers

442. As explained in our response to Working Paper 3, recent market exit by two challenger suppliers illustrates the impact that an inappropriately tight cap with too little headroom can have on supplier engagement.

Impact on the smart meter roll out

443. As noted in appendix 14, suppliers' licence conditions require them to take "all reasonable steps" to roll out smart meters. This "all reasonable steps" benchmark inevitably requires suppliers to make some form of trade-off between the amount spend on the smart metering programme and the eventual uptake by 2020. For example, a supplier could choose to invest in additional marketing and incentives designed to encourage more reluctant consumers to take up a smart meter. British Gas has previously outlined its approach to "all reasonable steps" in the yearly smart meter milestone reports produced for Ofgem.
444. By setting an allowance for smart meter costs, Ofgem will have set an upper bound on a "reasonable" level of spend by an efficient operator. If it turns out that this level of spend proves to be insufficient for suppliers to convert as many customers to smart metering as had originally been assumed in the rollout trajectory Ofgem uses to set the control, this is an effect that Ofgem's impact assessment will need to take into account.
445. British Gas has previously carried out work (shared with Ofgem as part of the smart meter milestones reporting) to set out the incremental costs of converting additional customers to a smart meter. We would be happy to discuss further with Ofgem the potential trade-offs between spend on the smart meter rollout and achievable 2020 milestones.

Question A14.4: Do you have reason to believe the default tariff cap could disproportionately impact any of the nine protected characteristics under the Equality Act 2010? Please provide any supporting evidence.

446. As explained in our response to question A8.8, our analysis has shown that customers on the Priority Services Register tend to have higher costs to serve. The conditions for being on the PSR include criteria relating to age (households with someone of pensionable age) and disability.
447. Nevertheless, the price cap that Ofgem is proposing would not be different for these groups. As we have explained elsewhere in our response, it would simply need to be set at a level that means the supplier with the highest proportion of vulnerable customers is still able to finance its activities and compete effectively. We do not expect that a cap set in such a way would disproportionately impact any one group.

Question A14.5: Do you have any additional information or data on the impact of the implementation of the existing safeguard tariffs on switching rates that would inform this analysis?

448. Our response to Working Paper 3 set out how the existing safeguard tariff has led to a narrowing of the gains to switching in that market, and therefore reduced levels of switching. The publication of other parties' responses to the working papers demonstrates a consistent picture: The adverse effect of the PPM cap on switching rates is being observed throughout the industry.
449. Centrica's analysis of uSwitch data demonstrated that price differentials among obligated suppliers fell from around £160 before the imposition of the cap to less than £70 afterwards. We have observed a resulting decrease in churn in the PPM segment: PPM churn (expressed relative to credit churn) fell following the imposition of the cap, and appears to be continuing to fall.
450. Scottish Power presented Ofgem analysis showing the convergence in PPM tariffs (based on data from Energylinx). It reported that, as a result, prepayment churn had decreased, despite credit churn increasing.
451. SSE also presented the Ofgem analysis showing the convergence of tariffs. It reported a resulting marked decline in PPM switching rates.
452. uSwitch has also recently carried out analysis (available on its inSight platform) which is consistent with the picture observed by suppliers. The prepayment cap can be seen to result in a narrowing of prices, and thus a reduction in the savings offered to customers. At the same time, prepayment switches (as a proportion of all switches on the platform) have fallen.
453. Furthermore, only a year's worth of data on the effects of the cap are available. To the extent that the reduction in gains from switching has a longer-run effect on switching rates, this will not be visible yet in the data. The experience of the prepay market is therefore likely to understate the impact of a similar cap in the credit market on switching rates over the course of two or more years.