

Executive Summary

1. We believe that competition is the best way of protecting the interests of consumers in the long term. For this reason, we do not believe that introducing a price cap is the right way forwards. Instead we continue to believe that measures that promote engagement – such as ending “evergreen” contracts – will lead to better long term outcomes for consumers. We continue to believe Ofgem should consider this policy option.
2. It is encouraging that one of Ofgem’s obligations in setting the cap as set out in the Domestic Gas and Electricity (Tariff Cap) Bill is to ensure suppliers compete effectively. It is critical that this consideration is fully met. However, successfully balancing the four mandatory obligations set out in the Bill will be challenging for Ofgem.
3. We believe that a thorough and transparent consultation process is critical to Ofgem’s ability to balance and ultimately attain these obligations. For this reason, we will be engaging fully with Ofgem’s consultation process, and in the development of the price cap. However, the compressed consultation timeframes do raise a material concern in this context.

Choice of methodology

4. We support Ofgem’s decision to consult on a “full range of possible models” for tariff cap design. The methodology used by Ofgem to set the Default Tariff Cap 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.
5. For this reason, the “basket of market tariffs” approach to setting a cap would be wholly inappropriate. This approach would not allow an explicit assessment of the level of efficient cost necessary for a supplier to conduct its business. It would fail to control for legitimate differences in costs across suppliers. It would also fail to control for the fact that the cheapest tariffs in the market are unsustainable acquisition tariffs, and expose suppliers to risks that could not be controlled or mitigated.
6. Instead Ofgem should focus efforts on developing options 2, 3 and 4 that take into account the costs of all suppliers (including the “bottom-up” cost assessment option). Those options that use existing methodologies as a starting point for setting the cap would require extensive work to develop a cap that meets the Bill’s mandatory obligations. In particular, we have documented the extensive revisions we believe are necessary to the prepayment (PPM) price cap methodology as part of this response¹.

Cost assessment

7. The cost categories set out by Ofgem as requiring assessment in the price cap are consistent with the Consolidated Segmental Statements (CSS), and so look appropriate. However, careful thought will need to be given to the methodologies used to estimate

¹ We also highlighted these necessary revisions as part of our response to Ofgem’s consultation on the extension of the PPM cap to vulnerable customers (January 2018). This submission should also be taken into account in the context of this process.

an efficient level of costs allowed for each cost category. We would also reiterate that the chosen methodology needs to allow for legitimate differences in costs, including costs to serve different customers reflecting their varying needs and preferences; “higher cost” does not mean “inefficient” by definition.

8. In setting allowances for **smart metering costs**, Ofgem has suggested it may draw on elements of the PPM price cap methodology. We believe the CMA’s treatment of smart metering costs was fundamentally flawed in numerous respects. In setting this element of the cap, an appropriate allowance must be included that reflects all net costs of smart meters and this must be indexed forwards correctly. A failure to do so risks severely disrupting the smart meter roll out programme.
9. The CMA’s methodology for the inclusion of the costs associated with the smart meter roll-out relies on an assumption that the benchmark adequately covers these costs, and is in line with an estimate of £1.50/customer/year that it bases on the 2014 DECC smart meter Impact Assessment. This estimate is far lower than the efficient costs of the roll-out. The CMA further compounded this error by not considering how unit costs can be expected to change over time as the roll-out gathers pace.
10. We have a severe concern that the default tariff cap itself will dampen customer engagement, and therefore make it even more challenging for suppliers to generate the demand for smart meters necessary to make the rollout a success. Ofgem will need to recognise this effect in setting the cap, and make an appropriate cost allowance for activities that will increase uptake.
11. In setting an allowance for efficient levels of **operating costs** more broadly, Ofgem must recognise legitimate reasons why some suppliers face higher costs than others. Some of these cost drivers are beyond suppliers’ control in that they reflect different characteristics of their specific customer mix.
12. Important considerations in this regard are differences in payment method and proportion of customers that have a higher cost to serve due to their circumstances (e.g. customers with vulnerabilities). These considerations can be highly material. Data we have submitted to Ofgem suggests \propto . Similarly, customers who manage their accounts entirely online are significantly less expensive to serve than customers who opt to use suppliers’ offline services, with differentials of £60 observable in the market².
13. It is therefore critical that Ofgem conducts a systematic analysis of these cost drivers and controls for legitimate differences explicitly in any benchmarking analysis it undertakes. A failure to do so risks creating severe unintended consequences, such as firms seeking to avoid serving certain customer groups.
14. Similarly, in setting allowances for costs, Ofgem will need to understand and accept the potential effects on consumers if the cap fails to provide for adequate recovery of costs to serve. This relates in particular to impact on quality of customer service, and future innovation.
15. We agree most **environmental and social obligation costs** are outside of suppliers’ control. However, the cost allowance for ECO will need to reflect the anticipated potential change in the regulatory regime. This has the potential to increase costs for

² Ovo offers a £60 discount to dual fuel customers who opt for their online-only service.

energy suppliers materially as they seek to identify and engage specific groups of fuel poor consumers who would benefit from the ECO3 scheme.

16. Ofgem must be explicit about the **wholesale index** that it assumes in setting the cap and it is essential that there is no retrospection in its implementation. We believe six monthly updates to the cap should be adequate in ensuring the level of the cap reflects changes in commodity costs. However, we do not believe the index assumptions underpinning the PPM methodology would be appropriate for the default tariff cap. We suggest Ofgem assumes an 18-month (or at least 12-month) rateable strategy. To avoid retrospection in the implementation of this strategy, a transitional strategy should be adopted at the cap's outset.
17. The default price cap will need to enable suppliers to earn a normal **rate of return** on their assets. In this regard, Ofgem's suggestion that it is considering a 1.25% EBIT margin allowance would not be appropriate. The CMA's analysis underpinning the use of this level of EBIT was based on the assumption that an intermediary arrangement observed in the market could be applied to larger suppliers. This was flawed given there was no evidence the intermediary arrangements would be scalable – and certainly not on the same terms.
18. In addition, 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. The level of such costs critically depend on prevailing wholesale market conditions – escalating in times of high commodity market volatility such as those experienced in recent months. For a large supplier, these costs can be highly material. We have previously calculated these as being in excess of \pounds per annum.
19. It is essential that the price cap allows sufficient **headroom** above the efficient level of costs to enable a range of suppliers to compete for customers and thus ensure that there is effective competition. This subject was absent from this working paper, but we understand it will be the subject of a separate consultation.

Process and legislative framework

20. We recognise that Ofgem is following a heavily compressed consultation timetable so as to introduce the price cap as soon as reasonably practical once the Bill has been passed. However, this creates a risk that Ofgem is not adequately equipped with the necessary inputs from industry when setting the cap. A poorly specified cap would have material consequences for competition and consumers.
21. We therefore believe it important to reiterate that the requirement to implement the cap as soon as practicable cannot mean that Ofgem can be any less rigorous or precise in the development of the cap. Ofgem must only implement the cap when it is satisfied all of the mandatory obligations have been met.
22. We would note that two weeks to comment on the appropriate approach to designing a price cap is unprecedented. In light of the substantive issues relating to the treatment of costs highlighted above (elaborated upon further in our submission), the initial working paper will need to be supplemented by subsequent working papers covering all aspects of price cap design, and a detailed consultation document where the

justification/reasoning underpinning Ofgem's favoured approach can be the subject of meaningful engagement with stakeholders.

23. Similarly, the obligations set out in the Bill must be treated carefully in Ofgem's consultation. Ofgem needs to demonstrate that these have been applied (and met) when considering the treatment of costs. As part of Ofgem's consultation process, we therefore expect Ofgem to articulate why its choices regarding price cap methodology are more appropriate in meeting the duties and obligations specified in the Bill than others. That choice should be substantiated with reference to clear evidence on the impact on competition and consumers.

Response to Ofgem's Working Paper #1

Comments on the default tariff cap design

24. In Section 4 of the working paper, Ofgem has invited views on the overarching structure of the default tariff cap in terms of the number of different caps for a given consumption level, the need for payment-method-specific caps and how the cap varies with consumption. Our comments on these structural issues are set out in turn below.

The number of caps and the need to take account of payment method cost differentials

25. We agree that – as for the existing safeguard tariffs – there should be separate caps for gas and electricity, for different meter types and for different regions, so as to reflect the unavoidable differences in cost associated with serving customers on different fuel types, different meter types and located on different parts of the gas and electricity networks.

26. In addition to this, the caps will need to reflect other key differences in the costs of supplying different groups of customers. In this regard, we welcome Ofgem's intention to give further consideration to whether separate tariff caps should be set – as a minimum – for customers paying by standard credit ('SC') and direct debit ('DD') respectively.

27. As evidenced by our submission of 23 February (in response to Ofgem's RFI of 26 January), there are sizeable differences in the costs associated with serving customers on these different payment methods. Furthermore, much of this SC/DD cost differential is likely to persist even after the move to smart meters. For example:

- Working capital requirements will continue to be higher for SC customers, given the delay in receiving payment;
- Bad debt costs (and the associated costs of collection) will continue to be higher. Although smart meters will make it (operationally) easier to switch customers who fall into debt on to prepayment terms, it will still always be more likely for a SC customer to miss payments, than a DD customer where the payment is automatically taken from their bank account; and
- Call centre costs are (and will remain) higher for SC customers than DD customers. Although smart meters may reduce the number of queries relating to estimated bills, this would affect both DD and SC, meaning that the cost difference between these payment methods would be largely unaffected.

28. Data we have previously submitted to Ofgem suggests the SC/DD cost differential is more than \times for a dual fuel customer. It is therefore important that the methodology used to calculate the default tariff cap takes account of this payment method cost differentials. It will be even more important to consider such cost differentials if the cap reverts to being a cap specifically on vulnerable customers, for whom costs may be higher.

29. We agree that separate tariff caps for DD and SC customers would be one way of taking account of these cost differences. Failing that, any average cap would need to be set at

a level that allows suppliers with larger numbers of SC customers to cover their proportionally higher costs.

How the cap varies with consumption

30. We would support the principle of setting the default tariff cap at nil consumption and the typical domestic consumption value ('TDCV') level, and interpolating between these two points (or extrapolating above TDCV) on a straight-line basis to derive the level of the cap for all other levels of consumption. In principle, this would allow suppliers to recover both their fixed costs through a standing charge and their variable costs through a unit charge, provided that the cap levels at nil consumption and TDCV were appropriately calibrated.
31. In practice, however, Ofgem should bear in mind that some suppliers may not recover all of their fixed costs through the standing charge, but may do so in part through the unit charge as well. Consequently, care must be taken, particularly if a top-down approach with reference to external benchmarks is used to set the charge (similar to the operation of the existing PPM tariff cap methodology). If the tariff cap's standing charge and unit rate are set by reference to the tariffs of suppliers with customers who have disproportionately high average levels of consumption, it will not allow other suppliers whose customers have lower average levels of consumption to recover their costs.
32. This underlines the importance of directly comparing the level of the cap to the costs that suppliers actually face, and doing so with reference to all levels of consumption rather than only the TDCV level.

Comments on estimating an efficient level of costs

33. In Section 5 of the working paper, Ofgem has invited views on how to determine a supplier's "efficient level of costs". The comments we provide below relate specifically to the proposed *default* tariff cap. It is important to recognise that an appropriate estimate of an efficient level of cost would be different if the cap were to be applied solely to a different group or subset of default tariff customers, such as vulnerable customers, for whom costs may be higher. Consequently, any cap solely covering a customer group with higher average cost to serve would need to reflect their associated higher costs.

Price versus cost benchmarks

34. It is imperative that – whatever the design of the price cap methodology – Ofgem allows 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 and the retail market. Because the safeguard tariff will cover a substantial proportion of GB domestic customer base, a cap that did not allow suppliers to recover the cost of supplying these customers (including their cost of capital) risks creating serious financeability issues for energy suppliers.
35. This is a critical consideration, not only for the methodology used to set the initial level of the cap but also for the methodology used to update the cap over time – both of these

elements of the methodology must reflect the costs and risks that suppliers face in serving customer groups protected by the cap. Given this:

36. We welcome Ofgem’s statement that it plans to consider a fuller range of models than in its December 2017 consultation³, and in particular its intention to consider a bottom up (BU) approach that would directly model the cost of supplying the affected customer base.
37. In any event, whatever methodology is used, Ofgem will need to look at costs – either directly (as part of a bottom-up methodology or for the purposes of making adjustments to a top-down competitive benchmarking method) or indirectly (as a sense check on other models it is considering).
38. This consideration of costs needs to be thorough and we consider that this effectively rules out the basket of tariffs approach as a viable option for the reasons set out in the next section on “*estimating an efficient level of costs to set the initial level of the cap*”. We would be concerned by any indication that Ofgem is not confident that it has time to be thorough in its consideration of costs, given its aspiration to roll out the cap by the end of 2018.
39. We challenge the “significant degree of discretion” Ofgem intends to give itself for making adjustments to companies’ costs to reflect efficiency.⁴ We do recognise that suppliers may not – in the normal course of business – hold all of the cost information required for a bottom-up assessment in ideally comparable form. We also agree that Ofgem needs to take this into consideration, for example when considering how to benchmark the costs of different suppliers. However, this does not avoid the need for Ofgem to follow a rigorous and evidence-based approach to the design of the cap; on the contrary, if Ofgem needs to make judgement calls about specific costs, any such judgement must be based on a clearly-reasoned assessment of the available evidence.

Estimating an efficient level of costs to set the initial level of the cap

40. Ofgem’s working paper only provides a high-level overview of the design options it is considering for setting the level of the default tariff cap. As such, this does not provide sufficient detail to allow us to comment on which of these four overarching methodology options that it has put forward for consideration would be most appropriate.
41. We continue to have significant concerns about the “basket of market tariffs” approach, as Ofgem has currently described it (**Option 1** in the working paper). We explained these concerns in some depth in Annex B of our submission of 31 January 2018⁵. Ofgem’s latest working paper does not provide any new information on the “basket of market tariffs” option, so these concerns still stand.
42. We understand that Ofgem plans to issue a separate working paper on the basket of tariffs approach, and so we will engage with Ofgem further on these issues in our response to that paper. To summarise:
 - A simple basket of tariffs approach would fail to control for legitimate and unavoidable differences in policy and other costs across suppliers, and would fail to control for the

³ “Providing financial protection to more vulnerable consumers”, Ofgem, 20 December 2017: https://www.ofgem.gov.uk/system/files/docs/2017/12/providing_financial_protection_to_more_vulnerable_consumers_0.pdf

⁴ Ofgem Working Paper #1, paragraph 5.4.

⁵ “Providing financial protection to more vulnerable customers”, Annex B, 31 January 2018.

fact that the cheapest tariffs in the market are likely to be unsustainable acquisition tariffs. Furthermore, it is not clear how Ofgem would control for other legitimate cost differences or to exclude unsustainable acquisition tariffs without significant additional work.

- Ofgem has suggested that the tariffs (and suppliers) that make up the basket would change over time, depending on which were the cheapest in the market. This means that the cap would be designed to follow a level that is lower than any supplier could reasonably be expected to achieve over the medium term. For example, the lowest tariffs in the market at any point in time are likely to reflect suppliers with the lowest wholesale costs. The basket methodology would essentially select suppliers for inclusion within the benchmark based on whether they had been in luck with their wholesale costs⁶. This means that a basket-based cap would be likely to follow the – unachievable – lower envelope of possible wholesale costs. Similar concerns would apply to other cost categories where the timing of expenditure may vary from supplier to supplier over time depending on suppliers’ different strategies (e.g. smart meter rollout costs).
 - The “basket of tariffs” cap is opaque in terms of the allowances it provides for various cost categories and how these change over time. This exposes suppliers to significant risks from the potential mismatch between the movement of their costs and the level of the cap. For example, even if the basket were based on specific benchmark suppliers, other suppliers would still not know the hedging strategy that is implicit within the cap.
43. We also continue to have serious concerns about simply extending the existing CMA benchmark to default tariff customers (**Option 2**) unless a number of adjustments are made to the methodology. These adjustments would need to include:
- adjustments of the treatment of policy costs at nil consumption;
 - appropriate recognition of smart meter costs (including DCC charges);
 - an appropriate accounting for changes in the cost of shape over time;
 - a revised treatment of wholesale costs to align with any initial benchmark with the wholesale indexation methodology;
 - adjustments to recognise differences in customer base characteristics;
 - a review of the appropriate level of margin for retail supply businesses; and
 - a review of the appropriate level of headroom given the different scope of price caps.
44. We have explained our concerns about the existing PPM price cap methodology and some of the potential adjustments that could improve it in depth in previous submissions to Ofgem.⁷ Since the working paper does not progress the debate on these concerns, we do not repeat them again in full here – but to summarise our concerns are that:
- The methodology is based on only two benchmarks (Ovo and First Utility), neither of which is a good comparator for an efficiently-run large energy retailer serving a

⁶ Or indeed, could result from suppliers taking more risk in hedging (or not hedging) in order to seek to outperform a cap. In this regard, we would note that a higher level of risk taking could lead to other damaging unintended consequences, such as an increased risk of supplier default.

⁷ In particular, please refer to our response to Ofgem’s consultation on providing protection to more vulnerable customers, submitted to Ofgem on 31 January 2018; the Frontier Economics paper “*Understanding the PPM price control*”, submitted to Ofgem in November 2017; and Frontier Economics’ responses to the CMA’s comments to this paper, which we shared with Ofgem on 6 March 2018).

diverse set of customers. Examples include differences in the size and characteristics of the customers that these companies serve, as well as the business models that they employ.

- The PPM methodology does not accurately model the wholesale energy costs that an efficiently-run energy supplier can be expected to incur. In particular, it is likely to have permanently “hard-wired” any wholesale cost advantages that the benchmark firms enjoyed as a result of either their chosen hedging strategies, or simple luck, on the single snapshot date used to calibrate the cap.
 - The methodology does not accurately model the policy-related costs that an efficiently-run energy supplier can be expected to incur – including both smart costs, and costs associated with new policies.
45. Specifically, the CMA's methodology for the inclusion of the costs associated with the smart meter roll-out relies on an assumption that the benchmark adequately covers these costs, and is in line with an estimate of £1.50/customer/year that it bases on the 2014 DECC smart meter Impact Assessment. This estimate is far lower than the efficient costs of the roll-out. The CMA further compounded this error by not considering how unit costs can be expected to change over time as the roll-out gathers pace.
46. Nor are these concerns purely theoretical. As we have highlighted in recent submissions to Ofgem⁸:
- \times ; and
 - Evidence from the PPM sector reveals that the cap is having an impact on supplier and customer behaviour in a way that is consistent with a reduction in competition, with reduced tariff diversity and innovation, and PPM customer switching rates slowing relative to switching rates for other domestic customer groups.
47. We believe that – in practice – a well-designed version of **Option 3** would be similar to **Option 4**, but based on a smaller set of “benchmark” suppliers. This is because even if Option 3 were followed, it would still be necessary to assess all suppliers’ costs in determining whether the resulting cap was appropriate. In particular, any benchmark tariffs identified using an Option 3-type methodology would need to be adjusted to:
- ensure that the tariffs were set at a sustainable level (in the sense that they were high enough to enable the benchmark suppliers to cover their cost of capital); and
 - control for cost differences between the suppliers used to calculate the benchmark and other suppliers covered by the cap that have nothing to do with different levels of “efficiency” (for example cost differentials arising from differences in the mix of customers that these suppliers serve).

Possible approaches to updating the allowance for efficient costs

48. In practice, the approach to setting the initial level of the cap and the approach to updating the cap over time will be interdependent. It is therefore hard for us to comment on the most appropriate approach to updating the cap over time, without knowing how the initial level of the cap will have been set.
49. However, we do not expect that it will be possible to update the cap by reference to changes in observed supplier prices. Unless the cap allows significant headroom for competition, it will in effect dictate all prices in the market, including non-default tariffs.

⁸ Ibid.

Indeed, in such a scenario we would expect non-default tariffs to all-but-disappear from the GB market due to the damage that such a cap would do to suppliers' incentives to compete for customers by offering discounted or loss-making acquisition tariffs.

50. For these reasons, the cap will need to be updated with direct reference to changes in the wholesale, network, policy, other direct and indirect costs involved in serving default tariff customers. This would be the case even if Ofgem followed a top-down (i.e. market tariffs based) approach to set the original level of the cap. It may also be appropriate to use different methodological approaches to update the different cost components associated with serving default tariff customers. For example, the future development of some costs (e.g. those associated with the smart meter rollout) may be sufficiently uncertain that Ofgem will need to conduct regular periodic reviews for the purpose of updating the cap.
51. Ofgem suggests that if it were to revisit the costs directly for the purposes of updating the cap (rather than setting an index) it would need to be mindful not to distort suppliers' incentives to continue cutting back on their costs where possible. However, sufficient incentives to remain or become efficient are in place given the competitive nature of the retail market (provided that the cap itself permits sufficient headroom not to undermine this competition).

Bottom-up cost assessment

52. For the reasons explained above, the working paper does not provide sufficient information for us to comment in detail on the merits of a bottom-up methodology to set the price cap. Nonetheless, we agree that it is a methodology that should be considered.
53. The cost categories listed in Table 1 of the working paper are consistent with the CSS. The only cost category not reported in the table is suppliers' cost of capital (including the cost of adequate credit and collateral support need to engage in the procurement of energy), which – as Ofgem recognises later in the working paper – must be covered by the profit margin permitted by the cap.
54. However, careful thought will need to be given to the methodology used to estimate the costs of an efficient supplier in each category.

Direct fuel costs

55. Since direct fuel costs constitute the single largest component of GB energy retail bills, it is essential that any default tariff cap accurately models these costs and tracks their evolution in a timely fashion. It is also essential that Ofgem provides suppliers with sufficient information and lead time to adjust their own hedging strategies to accommodate the hedging strategy implicit in the cap. Ofgem should therefore seek to clarify this element of the tariff cap methodology as soon as possible, and provide assurance that it will not rely on wholesale prices predating the final licence condition (which suppliers cannot access) when setting the wholesale element of the default cap.
56. Below, we have provided a summary of the most salient issues that Ofgem must address when designing this element of the tariff cap methodology. Given the importance of

direct fuel costs, we have also provided further information and supporting evidence on each of these issues in a standalone annex at the back of this response paper.

Long term hedging

57. We are supportive of updating the wholesale price element of the cap every six months as an acceptable balance between holding risk and practicality. However the existing PPM cap has several issues that should be addressed if it were to be used for the default tariff cap:
- **Smoothing:** the PPM cap wholesale index can result in significant price variations from one cap period to another, creating a potential price shock for customers.
 - **Market liquidity:** the PPM cap wholesale index starts observing prices only eight months before each cap period starts. Given the significant volumes at stake, this would considerably reduce liquidity beyond that period if suppliers align their hedging approaches to the index, and run against Ofgem's objective to improve market liquidity in order to support competition and promote market entry.
 - **Seasonality:** the level of the PPM cap is linked to forward contracts covering an annual period, exposing suppliers to the risk of seasonal spreads varying between each cap period.
58. We have provided further explanation and evidence on each of these issues in Annex A at the back of this response document.
59. All these issues can be significantly mitigated by following a rateable purchasing strategy⁹ approach instead. It would consist of building the index rateably over a period of time and then fixing the volumes not secured on the rateable strategy at the average price of the final month prior to the price assessment (January for the cap applying from the following April to September and July for the cap applying from the following October to March).
60. We believe an 18-month rateable (18mR) strategy would protect customers from volatility to a greater extent than the PPM index while addressing the market liquidity and seasonality issues, but even a shorter period such as a 12-month rateable (12mR) (in line with the Supplier Cost Index) would be more suitable than the PPM methodology's index. As we explain further below, a transitional strategy could be implemented to address the fact that these indices make use observed prices over a longer history.

Shaping and imbalance

61. As Ofgem's working paper acknowledges, the existing cap only partially accounts for the within-year and within-day variation in demand that suppliers face. This results in it underestimating the actual cost of supplying gas and electricity. The following should be taken into account when accounting for shaping costs:
- **Seasonal/quarterly weightings:** The current PPM cap index assumes seasonal (for electricity) and quarterly (for gas) weightings that are not in line with customers' seasonal normal demand. Given that gas and electricity demand is more weighted towards the winter months than is assumed by the PPM index, this results in the

⁹ Please refer to the appendix at the end of Annex A for detailed explanation of our recommended alternative strategies.

methodology underestimating suppliers' costs. Therefore, these should be reviewed to ensure that they are reflective of the actual demand shape.

- **Monthly shaping cost:** The current PPM cap index effectively assumes that the electricity/gas consumption for each month in a season or a quarter is the same. However, electricity/gas demand changes between months within a season. This means that change in the relative price of gas and electricity between months can lead to increases in the cost to supply domestic consumers that are not captured by the existing wholesale indexation methodology.
- **Within month shaping cost:** The current PPM cap methodology also assumes that electricity/gas consumption is the same on every day within each month. However, demand can vary significantly within month, in particular due to weather. Given that this cost cannot be accurately forecast when setting the cap, we believe a risk premium would be the most appropriate way to account for it in the cap calculation.
- **Within day shaping cost:** The current index used for the PPM cap overlooks the fact that domestic demand has peaks in the morning and the evening. Moreover, the large increase of solar PV generation capacity has resulted in peakload prices decreasing in the middle of the day, while not reducing the price of electricity in the morning and evening part of the peakload contract. This means that the current indexation methodology (utilising a fixed 70%/30% baseload/peakload split) is increasingly likely to understate the true cost of purchasing electricity for a domestic consumption profile.
- **Imbalance cost:** As the working paper recognises, outturn demand may differ from suppliers' forecasts, resulting in imbalance charges. This needs to be accounted for in the level of the cap via an allowance, which could be calculated based on the observed difference between System Marginal Prices and short term market prices, and average imbalance volumes on domestic settlement profiles.

62. For further information on each of these issues, along with our suggested approaches to addressing them, please refer to Annex A.

Transitional challenges

63. As part of being a responsible and efficient supplier (and, we believe, like most large and medium energy suppliers in the UK), Centrica purchases energy in advance of delivery for our customers on default tariffs.
64. The hedging methodology used by the existing PPM price cap requires a significant lead time to be implemented. For example, the commodity index going into the calculation of the PPM price cap for the period Oct'18-Mar'19 started pricing on 1st Feb'18. ✂
65. We already highlighted this risk as part of our January 2018 response to Ofgem's consultation on extending the PPM tariff cap to vulnerable customers. The risk would be even greater for a default tariff cap, due to the large number of customers on such tariffs; ✂
66. Ofgem should therefore provide clarity on the transition period as soon as possible. In addition, it should give assurance that no observation of wholesale prices prior to the final licence condition will be used in setting the wholesale element of the standard tariff cap. This will avoid suppliers bearing an additional commodity risk through the regulatory intervention.
67. If the urgency of setting a price cap for this winter outweighs the concerns about smoothing and seasonality described above, then Ofgem could start with a short

observation period for the first cap period, and then progressively extend the window as future cap periods allow (i.e. apply a transitional strategy).

68. We recognise that the 18-month rateable approach we recommend (or at least a 12-month rateable approach) would also create a transition issue. However this could likewise be managed with shorter observation period for the initial cap periods. For example, it could use:

- a 2-month rateable strategy (Sep-18 to Oct-18) for the Q1-19 cap;
- an 8-month rateable strategy for the Sum-19 cap;
- a 14-month rateable strategy for the Win-19 cap.

Other transaction and trading costs

69. A reasonable estimate of transaction and trading costs should also be included in the cap calculation given the significant operating costs in relation to purchasing gas and electricity for our customers.

70. The market prices used in the existing cap calculation are mid-point estimates (average of bids and offers prices). However, a supplier would have to purchase gas and electricity at offer prices which are the minimum prices at which sellers in the market are willing to receive. Therefore, the cap should be calculated using published offer prices instead of mid prices to give a fair reflection of the costs of a stand-alone supplier.

Environmental and social obligations

Methodology for setting the initial levels of environmental and social obligations costs

71. We agree with Ofgem that most environmental and social obligation costs are beyond suppliers' control, meaning that it would be a meaningless exercise to attempt to benchmark these costs with a view to identifying an "efficient" level of expenditure.

72. Ofgem suggests that ECO may constitute an exception to this, as an area in which suppliers have some discretion around expenditure and raises the question of whether a "benchmarking approach" should be used to set this part of the allowance. However, while we agree that suppliers do have a degree of discretion as to how they go about meeting their ECO obligations, it is important to recognise that any attempt to benchmark suppliers' ECO costs would carry significant risks.

73. Suppliers have full discretion with regard to volume phasing as long as they deliver their obligation by the end of the relevant period. This means that different levels of ECO expenditure across suppliers at any given point in time may simply reflect the fact that some suppliers have front-loaded their programmes and made more progress towards their ECO targets than others. It would be wholly wrong to assume that suppliers with lower levels of ECO expenditure were judged to be "more efficient" in this scenario.

74. For these reasons, assessing a "fair" benchmark retrospectively is not easy. Furthermore, this task is currently impossible looking forward, as the forthcoming ECO3 scheme (to run from October 2018 – March 2022) has not yet been consulted on. In our view, the most sensible way to build ECO costs into a tariff cap would be to assume (as per BEIS's forthcoming impact assessment) that total scheme costs are £640m per

annum up to 2022. This cost should then be used to derive a per customer ECO allowance assuming average levels of consumption¹⁰.

75. In deriving the per customer ECO allowance Ofgem should take account of the proportion of customers that are served by ECO obligated suppliers. Large numbers of customers served by non-obligated suppliers means that the cost per obligated customer is higher than the cost per customer. If there are further increases in the number of customers served by non-obligated suppliers then Ofgem would need to revisit the calculation within the cap.

Methodology for updating other environmental and social obligations costs over time

76. Ofgem suggests that average realised environmental and social obligations costs could be indexed forward by OBR (following an approach similar to that used for the existing PPM and WHD safeguard tariffs). However, it also suggests that it would need to retain the option to revise the approach to setting policy cost during the lifespan of the cap “in the event that supplier obligations were changed in a way that materially affected their costs”.¹¹
77. We agree that “reopeners” of this nature will be critical. However, reopeners should be automated as far as possible (rather than relying on the regulatory discretion). Moreover, given the uncertainty about the future development of some environmental and social obligation costs, these reopeners should apply to:
- any material changes in the nature or cost of these existing obligations (this should include changes in the cost per customer resulting from changes to share of scheme costs that must be recovered from price capped consumers); and
 - any new environmental or social obligations that are introduced in the future.

Operating costs

78. Ofgem indicates in its working paper that it may draw on elements of the PPM tariff cap methodology when considering how to model operating costs for the purpose of the default tariff cap. It also indicates that it will consider whether and how to benchmark these costs against those of an efficient supplier, and that it will consider the approaches taken to setting an allowance for operating costs in other price control settings. We set out our views and observations on each of these three considerations in turn below.

Concerns with the PPM tariff cap methodology’s treatment of operating costs

79. The PPM tariff cap methodology’s treatment of operating costs suffers from a number of material deficiencies that should not be carried across to the default tariff cap, irrespective of whether Ofgem seeks to use an adapted version of the PPM methodology or opts to follow a different methodical such as a bottom-up methodology. We have already explained these deficiencies to Ofgem in detail in previous submissions, so we do not repeat these concerns in full here. Nonetheless, to summarise, these concerns are threefold.
- a. *The CMA made adjustments to the benchmark firms’ assumed overhead costs, but the nature of these adjustments was highly opaque.*

¹⁰ Whilst the cost per customer should be derived ECO costs should be treated as scaling with a consumer’s consumption levels when setting the levels of the cap for different levels of individual consumption.

¹¹ Ofgem Working Paper #1, paragraph 5.41.

80. In its Final Report, the CMA adjusted the benchmark firms' overhead costs as a percentage of revenues "to reflect the level of overhead costs that we would expect to see in a large firm that was operating with a stable customer base (i.e. one which was neither growing, nor shrinking materially year on year)."¹² The CMA stated that, to do this, it based the benchmark firms' overhead costs as a percentage of revenue in each year on "First Utility's actual overhead costs in 2014 and 2015" and "Ovo Energy's forecast overhead costs".¹³
81. However, the actual adjustments that the CMA made are unclear, and therefore difficult to evaluate. For example, the CMA indicates in Section 10 of its final report that it has made adjustments to Ovo's overhead costs based on Ovo's own forecast future costs. By contrast, in Appendix 10.1 of the same report, the CMA states that it has placed more weight on the evidence of the level of overhead costs achieved by First Utility than Ovo, and indicates that it may have made changes to Ovo's overhead costs to bring them into line with these estimates.¹⁴ It is not clear how this reconciles with the approach that the CMA states it has taken in Section 10.
82. Moreover, the opacity of this stage of the CMA's methodology here is a particular concern, given that would appear to have a substantial impact on the results of the CMA's analysis: based on the impact of this adjustment on the range of EBIT adjustments reported by the CMA, Oxera has estimated that the adjustment could account for between 25% and 85% of the CMA's detriment estimate. This in turn would indicate that this adjustment has a significant impact on the level of the benchmark that underpins the CMA's tariff cap, given the close linkages between the CMA's direct detriment analysis and its tariff cap methodology.
- b. The PPM methodology systematically understated the cost of the smart meter rollout.*
83. The CMA's methodology for the inclusion of the costs associated with the smart meter roll-out relies on an assumption that the benchmark adequately covers these costs, and is in line with an estimate of £1.50/customer/year that it bases on the 2014 DECC smart meter Impact Assessment.¹⁵ It assumes that this initial £1.50/customer/year cost will increase over time in line with inflation. For the reasons explained in full by Frontier Economics, neither of these assumptions is correct.¹⁶
- *This efficient costs of the smart meter roll-out are far higher than the CMA assumed.* The CMA's £1.50/customer/year cost estimate is based on the £36m per year (2009 prices) figure for the Equivalent Annual Net Cost to Business (EANCB) provided in DECC's 2014 Impact Assessment for smart meters.¹⁷ This document does not set out the basis of this calculation in a way that can be replicated, but – for the reasons previously set out by Frontier Economics – given the nature of the estimate it will materially understate the incremental net costs from smart faced by suppliers.¹⁸
 - *The CMA's assumption that unit smart meter costs will only rise with inflation was also incorrect.* As Frontier Economics have explained¹⁹, there are a number of

¹² Ibid, Paragraph 10.28.

¹³ Ibid.

¹⁴ Ibid, Appendix 10.1. Paragraph 38.

¹⁵ Ibid, Paragraph 14.238.

¹⁶ "Understanding the PPM control", Frontier Economics, 10 November 2017.

¹⁷ CMA Energy Market Investigation, Final report, CMA, June 2016. Paragraph 14.238.

¹⁸ "Understanding the PPM control", Frontier Economics, 10 November 2017, pages 21-22.

¹⁹ Ibid, pages 22-24.

reasons for this:

- First, the number of meters being installed in each year will be expected to rise month on month until sometime in 2018 or 2019. As the number of installations increases, the unit cost per customer to be recovered in the tariff cap will also need to increase.
 - Second, a number of the costs associated with the cost and installation of the meters are amortised, and therefore will continue to become cumulatively more important as smart meter numbers increase.
 - Third, meters are likely to become more expensive to install over time, as the “harder” to reach customers become a larger percentage of the pool of customers left to convert.
84. Because of these changes it will not be possible to rely on unadjusted historic measures of cost that are indexed by inflation. Instead, to be able to set an appropriate benchmark an assumption will need to be made about the appropriate rate of meter installation, as well as the associated unit cost, on a forecast basis.
85. Adopting the approach required by the Bill would necessitate that Ofgem take steps such as investigating fully the actual costs of suppliers, including the full actual costs of smart meter rollout. To do this properly, Ofgem will need to engage directly with suppliers because, for example, cost data that we submit to BEIS as part of our reporting is not exhaustive.
- c. *The CMA did not adequately control for differences in operating costs across suppliers arising from differences in customer mix or level of service.*
86. The CMA’s PPM tariff cap methodology was essentially “top-down” in the sense that it set the tariff cap with reference to the tariffs of two third-party suppliers (Ovo and First Utility). As explained above, a top-down methodology of this nature will only generate an appropriate tariff cap level if it controls for legitimate cost differences between the benchmark firms and other suppliers in the market that have nothing to do with different levels of “efficiency”, but instead reflect differences in customer mix or level of service. However, the CMA’s methodology overlooked – and as a result failed to control for – a number of these legitimate cost drivers. We discuss this in further detail in the following section.

Critical considerations for Ofgem’s plan to benchmark supplier operating costs

87. Ofgem has indicated that it will consider carrying out an exercise to benchmark suppliers’ operating costs, should a bottom-up approach be used to set the level of the cap. It also states that it will draw on the indirect cost benchmarking analysis that the CMA conducted during the Energy Market Investigation in considering what approach should be taken.²⁰
88. While we support the principle of focusing on aggregate operating costs for the purpose of any benchmarking exercise, it is critical to recognise that this does *not* obviate the need to take steps to ensure that the analysis is comparing these aggregate costs on a meaningful basis. In this regard, the CMA’s indirect benchmarking approach exhibited significant flaws, since it failed to take any steps to control for cost drivers that meant

²⁰ Ofgem Working Paper #1, paragraph 5.46.

that some suppliers legitimately faced higher costs than others, irrespective of efficiency considerations.

89. Some of these cost drivers may be beyond suppliers' control in that they reflect the different characteristics of the different customers they serve. For example, they may result from:

- **Differences in payment method.** As both Ofgem and the CMA have recognised, the cost to serve a customer can vary systematically depending on whether that customer is a credit or PPM customer, and – in the case of credit customer – whether he or she chooses to pay by direct debit or cash/cheque. We provided detailed estimates of how these costs vary in Centrica's case – along with an explanation of the factors driving these cost differences – in our RFI submission to Ofgem on 23 February 2018.
- **Differences in the proportion of customers who interact wholly or mainly online or offline.** Customers who predominantly manage their accounts online are less expensive to serve than customers who opt to use suppliers' offline services. For suppliers that strictly enforce this split between online and offline account management, this cost differential can be particularly significant (for example, Ovo offers a £60 discount to dual fuel customers who opt for their online-only service²¹). Again, we have already provided detailed estimates of how these costs vary in Centrica's case in our RFI submission to Ofgem of 23 February.
- **Differences in other customer characteristics.** Even after controlling for differences in payment method and online/offline interaction, the cost to serve a customer can vary widely from customer to customer:
 - Customers with “vulnerable” characteristics are typically costlier to serve than other customer groups. For example, customers on lower incomes are more likely to fail to pay or struggle to pay their bills in full and on time. This means that suppliers with a high proportion of such customers face higher bad debt costs and will spend more time providing assistance (e.g. over the phone) than other suppliers.
 - Customers on a Priority Services Register (PSR) require additional services – for example, the provision of additional communication, and additional meter reads carried out by the supplier. Ofgem's 2017 report on vulnerable customers in the retail energy market noted that around 18% of large suppliers' customers were on a PSR, compared to around 6% for small and medium suppliers.²²
 - Vulnerable customers are also more likely to contact suppliers: While British Gas's customers have on average a 3x chance of calling during a year, this figure rises to 5x for customers on the PSR, and 3x and 3x for customers on WHD B and WHD C respectively.

90. None of the cost drivers listed above has anything to do with considerations of operational efficiency. As such, any efficiency benchmarking analysis should control for these drivers, either by “normalising” each supplier's cost base (i.e. recalculating what each supplier's operating cost would be if all suppliers had the same mix of customers)

²¹ <https://www.ovoenergy.com/pay-monthly/compare>

²² “Vulnerable consumers in the retail energy market: 2017”, Ofgem, Figure 2:
https://www.ofgem.gov.uk/system/files/docs/2017/10/consumer_vulnerability_report_web_003.pdf

or by including these cost drivers as control variables in the analysis (e.g. for any regression-based analysis that tries to identify the drivers of operating expenditure).

91. In other instances, suppliers may have some degree of discretion over their operating costs and choose to incur higher costs in order to deliver a higher quality of service. In these instances, differences in operating cost would be attributable to product/service differentiation, rather than different levels of efficiency. For example:
- For some suppliers, the cost to serve customers who choose to manage their accounts online are nearly as high as the cost to serve other customers, thereby reducing or eliminating their ability to offer an online discount. However, this does not mean that these suppliers are necessarily “less efficient” than other suppliers who offer a larger online discount. Rather, it may simply reflect the different levels of service that different suppliers offer to online customers, with – for example – suppliers such as Ovo placing stricter restrictions than others on customers’ ability to use their call centres or other “offline” services without forfeiting their discount.²³
 - Some suppliers do more to help vulnerable customers than others. For example, over two-thirds of British Gas’s workforce had completed dementia awareness training by October 2017, and British Gas has achieved verification of BS18677 for Inclusive Services Provision.
 - Some suppliers provide more assistance to customers struggling to pay their bills than others. For example, some suppliers have trust funds and hardship funds to help such customers. Sometimes these are used to clear a debt completely. In some cases, these are open to all customers (British Gas Energy Trust, E.ON Energy Fund), whereas other suppliers restrict the fund to their own customers (npower Energy Fund, Ovo Energy Fund, ScottishPower Hardship Fund, SSE Priority Assistance Fund).²⁴ The same Ofgem report notes that only 27% of small and medium suppliers’ indebted customers were on repayment plans, compared to 62% of large suppliers’ indebted customers.
 - Different suppliers also provide different levels of value add in other ways that can readily be quantified – and therefore controlled for in any benchmarking analysis. For example, Ofgem analysis has shown that large suppliers provide higher rates of free gas safety checks relative to their customer base than mid-tier or small suppliers.²⁵
 - Different suppliers have made different levels of investment and different levels of progress to date towards the smart meter rollout programme. A benchmarking methodology that failed to recognise this, but instead erroneously assumed that the supplier with the lowest costs was simply more efficient than other suppliers would lock in an unrealistically low rollout cost that no supplier could hope to achieve over the course of the programme. We note that Ofgem has indicated that it will explicitly consider how to model smart meter rollout costs in a separate forthcoming working paper, so we do not discuss this specific issue further here, other than to note its

²³ Details of the restrictions that Ovo places on its online discount customers can be found in Ovo’s terms and conditions at:

<https://www.ovoenergy.com/binaries/content/assets/documents/pdfs/legal/ovo-energy-terms-and-conditions.pdf>

Ovo explicitly states in this document that “*We will regularly review your account activity to make sure that you have been following the Online Rules. If you haven’t, we will remove your Online Discount.*”

²⁴ “*Vulnerable consumers in the retail energy market: 2017*”, Ofgem.

²⁵ Ibid.

importance.

92. It is critical that Ofgem conducts a thorough and systematic analysis of these cost drivers and explicitly controls for these legitimate cost differences in any benchmarking analysis it undertakes. In particular:
- Ofgem could control for these differences in more than one way. One option would be to break the operating costs down into individual cost lines and make direct adjustments to these cost lines to ensure that they are meaningfully comparable (before adding these adjusted cost lines again for the purpose of benchmarking the adjusted operating costs at an aggregated level). Alternatively, it could run a statistical analysis that included control variables designed to capture differences in customer mix and type of service within the benchmarking model.
 - If Ofgem decides to make adjustments to the data before benchmarking then it should carefully explain its reasoning for any adjustments made (or declined to be made) to reduce the risk of imposing subjective judgement.
93. Both of these approaches could in principle allow Ofgem to conduct its overarching operating cost benchmarking analysis at an aggregate level while at the same time taking steps to control for (or directly strip out) legitimate and unavoidable differences between supplier's aggregate operating costs that could distort this comparison.
94. To the extent that the resulting tariff cap requires suppliers to cut back on their operating costs, the cap should build in a reasonable glidepath to allow suppliers time to make this transition. This is standard practice in price controls set for regulated entities. Failure to allow a reasonable glidepath for the cost to serve such a sizeable proportion of the customer base could create serious financeability issues for the energy suppliers.

Critical considerations for Ofgem's plan to assess the approaches taken to setting an allowance for operating costs in other price control settings

95. In paragraph 5.48 of its working paper, Ofgem briefly indicates that it will consider the approaches taken to setting an allowance for operating costs in other price control settings, including: the approach used in Northern Ireland; the approach used to set price controls for the supply companies prior to market liberalisation in GB, and the approach used to set water companies' operating expenditure allowance.
96. There may be a number of factors from the price controls that Ofgem has highlighted that are relevant to Ofgem's current plans for retail price regulation in competitive energy markets. However, Ofgem should be cognisant of the specific market circumstances in which it is seeking to impose price caps. There are a number of differences between the GB energy retail sector and these other sectors that one would need to take into account for the purposes of any analysis. Ofgem should certainly not seek simply to transpose approaches without fully considering the implications of these differences.
97. If Ofgem does take forward its analysis of these comparators from other price control settings, we trust that it will set out its analysis clearly and with sufficient detail to enable industry stakeholders to consider this and respond appropriately. We look forward to engaging further with Ofgem on this analysis in due course.

Other direct costs

98. Ofgem's working paper correctly notes that suppliers may incur other direct costs that are not captured under any of the headline categories it has listed (wholesale energy

costs, transportation costs, policy costs), including the cost of charges from the Data Communications Company (DCC) and the costs of funding Xoserve and Exelon. We do not believe it would be appropriate to carry out any form of benchmarking analysis on these costs, since they are beyond suppliers' control.

Return on capital

99. Ofgem rightly acknowledges that the default tariff cap should allow companies to make an EBIT margin that would allow them to make a normal return on capital. However, it does not set out a proposed approach to determining such a margin. Instead it simply notes that in setting the initial level of the safeguard tariff, the CMA adjusted the benchmark companies margin to permit an EBIT margin of 1.25%.
100. It would be unacceptable for Ofgem simply to assume that a 1.25% EBIT margin would be appropriate in the context of a default tariff cap on the basis that this was the approach adopted by the CMA for the PPM tariff cap. As Ofgem will be aware, the CMA's conclusion that a 1.25% margin would permit a large standalone supplier to cover its cost of capital was highly controversial and widely contested by industry stakeholders. In any event, as the CMA itself recognised, the 1.25% EBIT margin assumption was specific to the methodology that the CMA used for the purposes of designing the PPM price cap. It would need to be reappraised and updated for the purposes of a wider default cap.

The CMA's 1.25% margin assumption rested on an assumption about intermediary arrangements that would be inappropriate for an updated benchmarking analysis

101. One of the most contentious assumptions underpinning the CMA's 1.25% margin result was that the "efficient" benchmark supplier would make use of an intermediary trading arrangement, thereby obviating the need for the supplier to hold trading collateral. The CMA itself recognised that in the absence of such intermediary arrangements, suppliers would need to earn a higher EBIT margin than 1.25% to cover their cost of capital, since they would need to hold more capital for trading purposes.
102. It would be inappropriate to assume that such an arrangement would be available to a standalone supplier of scale on the terms that the CMA assumed, for the following reasons:
- The fee-based model is not prevalent in the UK (or indeed even the US), and there is no evidence the intermediary arrangements would be scalable such that they would be offered to a large standalone supplier on the terms that they are currently offered to small/mid-tier suppliers.
 - It is not realistic to believe that these arrangements would be scalable for a large standalone supplier operating on the scale of one of the six large energy suppliers in the way that the CMA assumed – and certainly not on comparable terms. The CMA relied on comparisons to the US to justify its assumption that the intermediary model could become more widely used in the GB. However, Centrica's own experience of using intermediaries in the US (through its Direct Energy subsidiary) suggests that:
 - individual intermediaries are only willing to take on a limited volume of exposure per counterparty;
 - there are only a limited number of intermediaries who have an appropriate credit rating which can provide this service (even in the US where there is a considerable amount of independent generation capacity); and

- the cost of risk transfer rises with size as the tolerance to absorb the risk in a portfolio is saturated, meaning that fees for small structures will not, therefore, scale linearly.
- Furthermore, we understand that the intermediary arrangements between Shell and First Utility on which the CMA relied to support its assumptions involved equity sharing, which the CMA erroneously did not factor into the fee. In other words, the CMA’s methodology is likely to have understated the real cost of using intermediary arrangements even for a mid-tier supplier operating on a smaller scale than the six large energy firms.
- Even if such arrangements were available they would not avoid the need for a supplier to hold an additional buffer of capital available to withstand severe commodity movements. However, the CMA failed to take account of this.

Other concerns with the CMA’s 1.25% margin assumption

103. The assumptions around the availability and scalability of intermediary trading arrangements set out above were not the only contentious assumptions underpinning the CMA’s finding that a 1.25% EBIT margin would suffice. In addition to this, Centrica and other industry stakeholders have also raised concerns that:

- 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. This matters because suppliers face significant short-term swings in the balance of creditors and debtors, meaning that these peak requirements are materially higher than the long-run average requirement. For a large supplier, these costs can be highly material. We have previously calculated these as being in excess of \pounds per annum.
- 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. If a supplier purchases more energy than it ends up needing (e.g. in the event of an unusually mild winter), then it will likely have to sell the excess energy back onto the market at a loss. Conversely, if a supplier does not purchase enough energy in advance (e.g. in the event of unseasonably cold weather conditions), then it will need to purchase additional energy at short notice at an elevated price, thereby potentially again exposing it to losses. 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 of assessment. 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.

104. All of these considerations meant that the CMA understated the amount of capital that an efficient supplier would need to hold and therefore understated the EBIT margin that

the supplier would need to make to cover its cost of capital.

105. This element of the CMA's methodology therefore remains highly controversial and warrants further careful investigation by Ofgem. This is all the more important given that the default tariff cap in question will apply to a substantially wider proportion of the GB domestic customer base than the PPM cap, meaning that financeability risks associated with not permitting suppliers to cover their cost of capital are considerably more acute.

Allowing sufficient headroom for effective competition

106. The legislative framework states explicitly that Ofgem must set the cap at a level that enables holders of supply licences to compete effectively for domestic supply contracts. This means that the tariff cap must be set at a level that builds in headroom over and above both the costs that an efficient supplier incurs in serving default tariff customers and the EBIT margin that the supplier must make to cover its cost of capital.
107. It is therefore concerning that the working paper makes no mention at all of the necessity of allowing headroom, even though:
- it professes to provide a high-level overview of the overarching design questions relating to the tariff cap methodology; and
 - this issue is key to a number of other issues highlighted in the Working Paper (e.g. the option of updating the cap by reference to changes in market prices).
108. Instead Ofgem only considers the costs that should be recovered by the cap and the competitive margin (which obviously should not be conflated with the additional headroom required over and above this margin to allow suppliers space to compete).
109. Ofgem has separately indicated in its open letter of 6 March that it plans to publish a standalone working paper on the principles it will use to set the level of headroom. We will provide more detailed commentary on how to calculate the appropriate level of headroom in our response to Ofgem's forthcoming standalone working paper on this issue.
110. Nonetheless we wish to emphasise the importance of giving serious consideration to this issue as soon as possible in the design process, since there will be a clear need to permit more headroom for a tariff cap that will apply to all default tariffs, which will apply to a larger number of customers than for a narrow PPM cap.
111. In deciding on the level of headroom, the CMA recognised that there was a trade-off between protecting customers (meaning a lower cap) and safeguarding the conditions for effective competition (meaning a higher cap). The CMA reasoned that because the PPM cap would only affect a relatively small proportion of the domestic customer base, less weight needed to be placed on the objective of safeguarding effective competition than would be the case for a more-wide ranging cap.
112. The CMA also reasoned that there were technical barriers to competition for PPM customers that did not exist for other customer groups. This again led it to place less weight on the importance of safeguarding competition for this specific customer group than it would have done for a wider default tariff cap where such technical barriers to

competition do not exist. It therefore follows that Ofgem must allow more headroom for competition under the default tariff cap than the CMA allowed for the PPM cap.

Comments on the legislative framework

Obligations in setting the price cap

113. We welcome Ofgem’s articulation of the legislative framework that it believes will apply in the setting of the price cap. Clearly there is potential for the final legislation to differ materially from the current draft proceeding through parliament. Should the obligations Ofgem must have regard to in setting the cap change (even to a minor extent), then any judgements or provisional decisions Ofgem makes in light of the existing Bill provisions may need to be reconsidered. Ofgem will need to consider and conduct meaningful consultation with stakeholders on its eventual proposals once the statutory framework is confirmed.
114. As matters stand, we are concerned that – other than outlining the text of the mandatory ‘considerations’ set out in the Bill – Ofgem has made no attempt to explain what those considerations mean in practice. Nor has Ofgem assessed each of its substantive proposals with reference to its likely statutory duties and the impact of these duties on the setting of the price control. However, the obligations set out in the Bill need to inform Ofgem’s decision-making at every step in its consultation process. Without this type of forensic assessment, there is a real risk that Ofgem may inadvertently create the conditions in which price controls remain a feature of the retail supply market.
115. As an example, when comparing its four headline options for estimating an efficient level of costs for the purposes of setting the initial level of the cap (at 5.10), it lists various factors which it thinks are relevant to which approach is “better”. In particular, Ofgem states that “our key consideration will be which approach would – given the time available to develop the methodology – provide the most reliable guide to efficient costs” (at 5.11). We do not believe this is the appropriate test. Instead, we would expect that Ofgem will analyse each option in a structured way with reference to each of the criteria currently set out in clause 1(6) of the Bill.
116. Furthermore, far from being a mechanistic exercise in which the mandatory considerations are acknowledged at the end of the process, we note that the Explanatory Notes to the Bill recognise that the price caps may engage Convention rights, including the protection of property rights such as our supply licence and our contracts with customers. It is noteworthy that the Explanatory Notes (para 47) recognise that Ofgem *has discretion* about various aspects of the price cap and that Ofgem “will be able to set the cap at a level that is proportionate to the aims to be achieved”. Again, this cannot be an assessment which takes place solely at the end of the process – at which point, realistically, many decisions about various aspects of the price caps will have already been made and will not be able to be unwound at that late

- stage. Assessments of proportionality therefore need to be made throughout the process.
117. We are happy to offer some preliminary comments and provide illustrations below on how Ofgem’s mandatory considerations should be applied. Please note that this is a non-exhaustive list.
 118. **Clause 1(6)(a)** refers to “the need to create incentives for holders of supply licences to improve their efficiency”. It is important that action taken in pursuit of this obligation recognises that different suppliers can have different cost bases without being inefficient. There are a variety of different suppliers operating in the market, with different approaches to issues such as customer service. As noted above, different suppliers have different cost bases for legitimate reasons unrelated to efficiency considerations (such as differences in customer mix). Indeed, this was recognised by the Business, Energy and Industrial Strategy Committee in its pre-legislative scrutiny of the draft Bill (para 63), noting that “suppliers of different sizes and operating with different business models face very different costs”. In this respect, the supplier with the “lowest” cost base is not necessarily the “most efficient”.
 119. There will accordingly be consequences for consumers in terms of investment in future service and innovation if a notional supplier with an ostensibly low cost base is used as the benchmark for efficiency. Furthermore, the CMA noted in this respect that the best long-term guarantee of efficiency is to encourage competition. It would therefore be perverse for Ofgem’s price cap methodology to aggressively reduce prices, to an extent that it failed to enable suppliers to differentiate themselves on non-price factors such as customer service metrics.
 120. This is entirely the opposite impact to what is intended: the Government’s impact assessment (para 37) notes that due to the “relatively low SVTs and default tariffs” of some small and medium sized suppliers, the price cap is intended to ensure “fixed tariffs do not bunch around the level of the cap”. In other words, it was not intended that the price cap create a “race to the bottom” by confusing the lowest possible cost base with “efficiency”. In this respect, clause 6(a) complements the other mandatory obligations, by making it clear that Ofgem’s role is to continue to allow competition and service differentiation.
 121. This is important because it requires that Ofgem – even when assessing the level of efficient costs – to have careful regard to non-price factors. For example, this suggests that Ofgem must fully investigate actual costs when calibrating a price control.
 122. **Clause 1(6)(b)** requires Ofgem to consider “The need to set the cap at a level that enables holders of supply licences to compete effectively for domestic supply contracts”. In this respect, it is important to recognise that the price cap is expressly intended to be a short-term solution “to protect domestic energy customers from unjustifiably high prices ... until the conditions for effective competition are in place” (Impact Assessment p 1). There is therefore express recognition of the danger that a price cap could produce a backwards step away from a competitive market.
 123. The Impact Assessment implicitly acknowledges a tension between removing all of what the CMA alleges SVT consumers overpay, and the ultimate goal of creating an effectively competitive market. This has also been highlighted in evidence submitted to the BEIS select committee, notably by Professor Stephen Littlechild who stated that “a price cap set to remove such alleged detriment will have a serious adverse impact on

competition and hence on customers.²⁶ In addition, the Impact Assessment states that the Bill is intended to result in “reducing [i.e. not necessarily eliminating] the amount of annual detriment for these customers, while maintaining incentives for customers to switch and suppliers to compete”. This precautionary approach is fully consistent with the overall purpose of the Bill to achieve short-term improvements, while not jeopardising the Government’s longer-term goals.

124. Clause 1(6)(b) requires that the design must not impede competition for SVT / default tariff customers. The cap cannot be set at a level such that there is no ability – nor that incentives are reduced – to differentiate (including on price) in serving such customers.
125. It is also notable that the clause does not distinguish between different types of customer. It requires Ofgem to enable competition “for domestic supply contracts” generically. This means that the cap must not impede the effective function of competitive markets for non-SVT/default customers in addition to not impeding the effective function of competitive markets for SVT/default customers.
126. **Clause 1(6)(c)** requires Ofgem to consider “the need to maintain incentives for domestic customers to switch to different domestic supply contracts”: Measures which mean every supplier tends to the same price will breach this provision – and run contrary to the Government’s own expectations in its impact assessment (para 37) that the price cap should ensure “fixed tariffs do not bunch around the level of the cap” due to the presence of lower cost small and medium sized suppliers.
127. Consistent with the Government’s ultimate aims for the market, this short-term intervention must not compromise customers’ incentives to be actively engaged in the market and not be on default contracts. Customers must be free to choose between suppliers, some of whom may offer a basic service at the lowest prices, and others that provide a more comprehensive service at a higher price.
128. In this respect, we would expect Ofgem to review the operation of the prepayment meter price cap thus far and, in particular, give serious consideration to clear evidence of tariff convergence in this market segment. A price control in which prices across the market simply converge would not maintain incentives for domestic customers to become engaged, in the way intended by this clause or by the Government’s policy objectives generally. It will therefore be critical that the default tariff cap methodology allows suppliers sufficient headroom – over and above both the costs that an efficient supplier incurs in serving default tariff customers and the EBIT margin that the supplier must make to cover its cost of capital – for effective competition to take place below the cap.
129. In the context of considering the obligation to maintain incentives for customer switching, Ofgem will also need to assess the extent to which the level of any cap could dampen demand for smart meters, which are, on the face of the bill, one of the determinants of effective competition. Given that the rollout of smart meters has already been characterised by weak customer demand, the application of the provisions of Clause 1(6)(c) will be intertwined with the future penetration of smart meters.
130. Finally, **clause 6(d)** requires Ofgem to consider the need to ensure that holders of supply licences who operate efficiently are able to finance activities authorised by the licence.

²⁶ <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/business-energy-and-industrial-strategy-committee/prelegislative-scrutiny-of-the-draft-domestic-gas-and-electricity-tariff-cap-bill/written/73918.html>

This means that all suppliers who operate efficiently (regardless of their business model, or the particular trade-off between price and service quality they choose, or type of customers they supply) must be able to finance each of their activities authorised by the licence. Specifically, this confirms that Ofgem is not permitted to require suppliers to cross-subsidise different activities or provide services to any particular group of customers at a loss, or only subject to being subsidised by other customers. An argument which assumes these customers can be subsidised by others is not tenable in light of clauses 6(b) and 6(d).

131. A final observation is that, although these clauses are worded as “considerations” Ofgem must have regard to, in fact the Bill clearly indicates that there is a need to ensure these requirements are met (i.e. they are in effect obligations). Therefore, it would be inappropriate for Ofgem to decide it can “weigh” the different considerations and decide that not all such considerations need to be met. These considerations are given equal weight in the Bill, and each is an independent but necessary requirement for the price cap. In this respect, it is telling that (despite our concerns about contradictions between the objectives) the Business, Energy and Industrial Strategy Committee found that “if set at the right level and with sufficient headroom, an absolute price cap would allow regulation and competition to co-exist” and that “it will be possible, if challenging, for Ofgem to set a cap that meets subsections 1(6)(a), 1(6)(b) and 1(6)(e)”.
132. Overall, there is a clear requirement – both from the mandatory considerations set out in the Bill and in the overall framework for termination of the cap – that the price cap is intended to be a temporary measure, to provide some relief to customers which the CMA considers are being overcharged, but which must not compromise the Government’s end goal of ensuring that the conditions for effective competition are put in place. Clause 1(6) of the Bill is therefore intended to ensure the price cap is introduced in a way which does not lessen incentives for:
 - customers to be engaged and to switch suppliers;
 - suppliers to effectively compete in the market with a variety of different propositions; and
 - customers to be protected from market instability that could ensue were the financeability of suppliers undermined. Given the Convention rights which are engaged when imposing price caps, it is especially important that any potential impact on financeability is scrutinised closely by Ofgem and found to be proportionate.
133. These factors (together with the timing requirement, discussed below) require Ofgem to implement a cap with appropriate headroom – rather than one which risks eliminating price and service-based competition for SVT customers. Indeed, the need for sufficient headroom has been expressly acknowledged by Parliament’s Business, Energy and Industrial Strategy Committee – and that a “precautionary” approach is therefore adopted to minimise any risk to Government’s ultimate policy goals. It is essential that this precautionary approach informs every step of Ofgem’s decision making process.
134. As we explain above, adopting the approach required by the Bill would necessitate that Ofgem take steps such as:
 - investigating fully the actual costs of suppliers, in a way which ensures any price cap would reflect legitimate cost differences between suppliers rather than assume all cost differences are the result of inefficiencies;
 - to the extent the price cap requires efficiencies to be found, specifically identifying

such efficiencies, and adopting a reasonable and realistic glidepath (consistent with the approach taken by other regulators) for suppliers to achieve these efficiencies;

- understanding and articulating the consequences for consumers of proposing that particular efficiencies should be achieved by suppliers;
- not making retrospective assumptions about the purchasing and hedging strategies adopted by suppliers prior to the date Ofgem confirms the price cap methodology;
- using an appropriate margin allowance rather than simply assuming the 1.25% figure adopted by the CMA is correct and appropriate in the context of a broad price cap.; and
- allowing the headroom necessary to facilitate competition and maintain an incentive to switch.

135. We note Ofgem’s view “that the maximum amount suppliers can charge will not vary from company to company”. We would welcome any more detail Ofgem is able to share about how it considers this flows from clause 2(2)(c) which only provides that the licence condition(s) imposed on each supplier must be the same and; on its view on the proper interpretation of clause 2(2)(f), in particular the use of the term “cases”.

Feedback on forthcoming working papers and process for ongoing engagement

The timeline for implementing the price caps

136. We recognise that Ofgem is following a heavily compressed consultation timetable so as to introduce the price cap as soon as reasonably practical once the Bill has been passed. However, this creates a risk that Ofgem is not adequately equipped with the necessary inputs from industry when setting the cap. A poorly specified cap would have material consequences for competition and consumers.

137. We therefore believe it important to reiterate that the requirement to implement the cap as soon as practicable cannot mean that Ofgem can be any less rigorous or precise in the development of the cap. Ofgem must only implement the cap when it is satisfied all of the mandatory obligations (discussed above) have been met.

The process for ongoing engagement

138. We have a number of significant concerns about the adequacy, transparency and robustness of the current process, as articulated in Ofgem's Open Letter of 6 March 2018. This is not a technical legal matter, but an issue that is critical to the quality of any decision that Ofgem ultimately reaches in relation to the level of the cap and the future of the retail energy supply market.

139. Put simply, the current process appears to be too short and the proposed timeframes risk failing to afford industry stakeholders with the opportunity to provide Ofgem with well-informed and well-developed responses to consultation documents and requests for information. Consistent with well-established legal principles, any consultation should ensure that adequate time is provided for responses, be appropriately specific

for the affected stakeholders and provide for responses to be taken into account by the public body²⁷.

140. The need for a thorough and extensive consultation process is critical in relation to a matter that involves the most intrusive and complex form of regulatory intervention, namely direct retail price regulation that circumscribes the commercial freedom of private market actors²⁸. This is particularly the case given the Bill fails to allow for a route of appeal of Ofgem's cap determination to the CMA.
141. We also note Ofgem's proposed process governing the computation of the retail price control contrasts unfavourably with those that Ofgem and other sector-specific regulators typically adopt when setting price controls:
- RIIO-ED1: the end-to-end process for Ofgem to put this control in place took 3 years (February 2012 to February 2015);
 - Ofcom's BCMR price controls took 2 years (April 2011 to March 2013); and
 - Ofwat's PR19 process will take 2 ½ years (July 2017 to December 2019)
142. Ofgem's proposed process for setting a retail price control that - end-to-end - will take less than 6 months, with stakeholders potentially being provided no more than 2 weeks²⁹ in some instances to respond to Ofgem's publications, raises three material risks that Ofgem must take into account and address as a priority:
- Industry stakeholders are unable to provide meaningful input and comment on important matters within the specified highly constrained timeframes;
 - Ofgem is correspondingly deprived of critical evidence upon which it would need to rely and take into account when formulating its decision; and
 - Ofgem itself, through a self-imposed deadline, is unable to assimilate and genuinely turn its mind to the evidence placed before it, therefore raising the risk that Ofgem mis-directs itself in the setting of the price control.
143. The fact that the draft legislation expresses an aspiration for Ofgem to set a cap “as soon as reasonably practical” after the legislation comes into force does not avoid the need for an extensive and thorough consultation on highly technical and complex matters of economic regulation. As noted earlier, it is a requirement of public administrative law that respondents are given adequate time to respond to consultations, which the legislation cannot displace. Ofgem, in its own consultation guidance, says that for major issues of wide interest there will normally be a 12-week consultation³⁰.
144. Our response alone to Ofgem's preliminary consultation document on the high-level design of the price control - within the highly compressed 2 week timeframe - reveals the need to investigate, analyse and consult further upon numerous substantive issues before Ofgem can confidently conclude on satisfying its duties and obligations when

²⁷ See for instance *R v London Borough of Brent, ex p Gunning* [1985] LGR 168 , expanded upon in *Moseley v. Haringey LBC* [2014] 1 WLR 394

²⁸ See for example the *Eisai* case requiring “an exceptional degree of disclosure and consultation” in such instances; *R (Eisai Ltd) v National Institute for Health and Clinical Excellence (NICE)* [2008] EWCA Civ 438

²⁹ Ofgem itself notes in its own guidance that issues of material significance would typically be the subject of a 3 month consultation. The setting of a price control itself raises numerous substantive policy questions – that each on a standalone basis would qualify for the consultation process envisaged in Ofgem's guidance . See <https://www.ofgem.gov.uk/consultations/our-consultation-policy>

³⁰ <https://www.ofgem.gov.uk/consultations/our-consultation-policy>

setting the price control. This strongly suggests that the process articulated in the Open Letter of 6 March is unlikely to be satisfactory for a regulatory intervention of this magnitude.

145. In this context, the broader process has not been fully explained. At the moment we understand that Ofgem will publish a series of working papers and that, at the end of that process, there will be a policy consultation which will summarise Ofgem's thinking³¹.
146. Key elements of the process are still to be explained and there are notable problems with those aspects which appear to be clearer. There is no apparent process for handling dependencies between the working papers. The subjects of the papers are, by definition, inter-related. But the proposed process will deal with each subject in isolation, which raises the risk that any decisions are reached in a legal and policy vacuum with no further consultation with industry stakeholders.
147. Similarly, there does not appear to be any proposal for iterative engagement between the "closure" of each working paper and the formal consultation suggested for later in the year. In this regard, a programme of detailed iterative engagement with stakeholders would greatly enhance the process and the overall quality of Ofgem's ultimate decision.
148. Given the above concerns, we would invite Ofgem to provide confirmation that the necessary degree of flexibility can and will be introduced to the proposed process, for example, by:
 - extending the process where necessary to enable industry stakeholders to provide Ofgem with well-informed responses to 'working papers' or requests for information;
 - ensuring that there are appropriate subsequent consultations on the key substantive issues highlighted in our response and providing clear reasoning for Ofgem's proposed approach(es) or positions on key issues.

³¹ Ofgem open letter of 6 March:
https://www.ofgem.gov.uk/system/files/docs/2018/03/update_on_our_plans_for_retail_energy_price_caps.pdf

Annex A: Further comments and evidence on how the tariff cap methodology should account for direct fuel costs

