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Default Tariff Cap: Policy Consultation

Appendix 3 - Updated competitive reference price

Consultation - supplementary appendix

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Overview:

The energy market works well for consumers who shop around. Suppliers compete for these engaged consumers, offering low prices to gain or retain their custom.

But the retail energy market is not working for consumers who remain on their supplier's default tariff. Our work, and the Competition and Markets Authority's investigation, has shown there is little competitive constraint on the prices suppliers charge these consumers. As a result, they are paying more than they should be.

To address this problem, Government has introduced legislation into Parliament which would require Ofgem to design and put in place a temporary cap on all standard variable tariffs and fixed-term default tariffs. We anticipate that Parliament will approve the Domestic Gas and Electricity (Tariff Cap) Bill in the summer, and the default tariff cap will come into force at the end of 2018.

We are now consulting on how we might design and implement the default tariff cap. This supplementary appendix to the main consultation document sets out our proposals in relation to the updated competitive reference price approach to setting the initial level of the cap. This document is aimed at those who want an in-depth understanding of our proposals. Stakeholders wanting a more accessible overview should refer to the main consultation document.

Associated documents

Policy consultation for Default Tariff Cap – Overview
https://ofgem.gov.uk/system/files/docs/2018/05/default_tariff_cap_-_policy_consultation_-_overview.pdf

Links to supplementary appendices

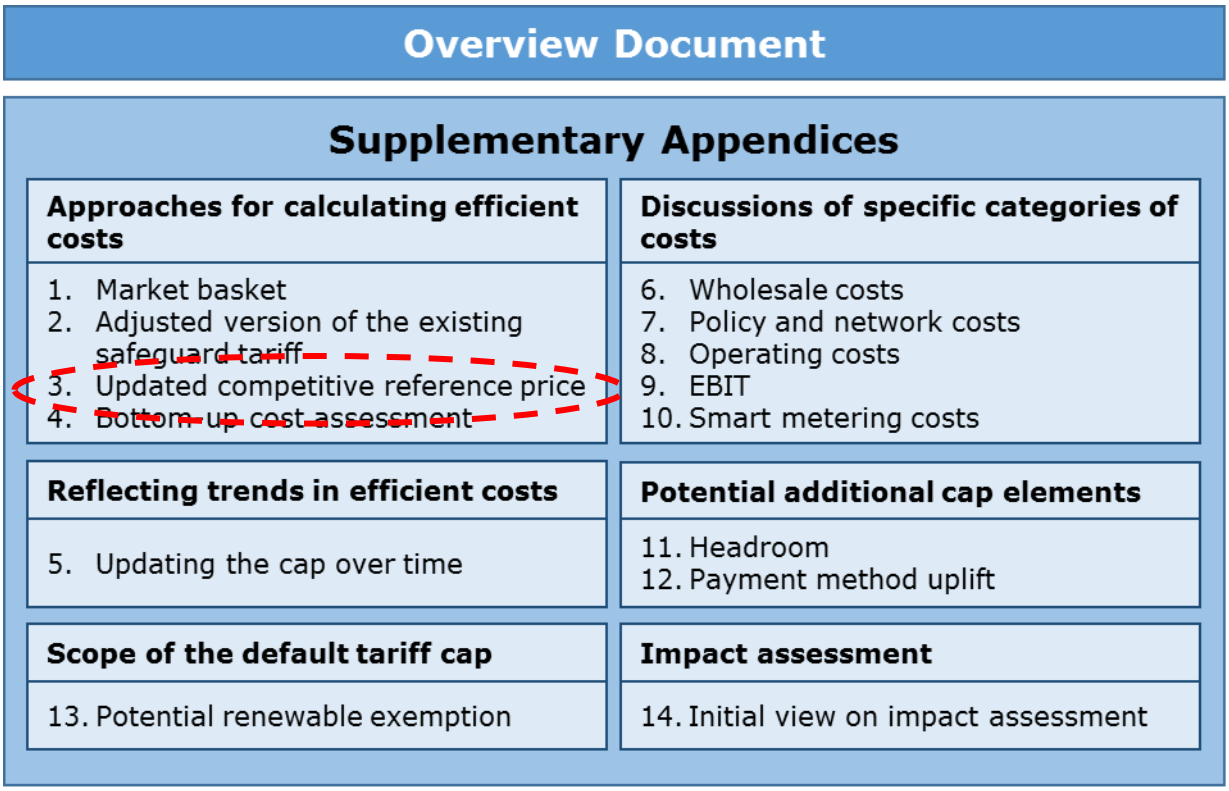
- Appendix 1 - Market basket: https://ofgem.gov.uk/system/files/docs/2018/05/appendix_1_-_market_basket.pdf
- Appendix 2 - Adjusted version of the existing safeguard tariff https://ofgem.gov.uk/system/files/docs/2018/05/appendix_2_-_adjusted_version_of_the_existing_safeguard_tariff.pdf
- Appendix 3 – Updated competitive reference price https://ofgem.gov.uk/system/files/docs/2018/05/appendix_3_-_updated_competitive_reference_price.pdf
- Appendix 4 – Bottom-up cost assessment https://ofgem.gov.uk/system/files/docs/2018/05/appendix_4_-_bottom-up_cost_assessment.pdf
- Appendix 5 – Updating the cap over time https://ofgem.gov.uk/system/files/docs/2018/05/appendix_5_-_updating_the_cap_over_time.pdf
- Appendix 6 – Wholesale costs https://ofgem.gov.uk/system/files/docs/2018/05/appendix_6_-_wholesale_costs.pdf
- Appendix 7 – Policy and network costs https://ofgem.gov.uk/system/files/docs/2018/05/appendix_7_-_policy_and_network_costs.pdf
- Appendix 8 – Operating costs https://ofgem.gov.uk/system/files/docs/2018/05/appendix_8_-_operating_costs.pdf
- Appendix 9 – EBIT https://ofgem.gov.uk/system/files/docs/2018/05/appendix_9_-_EBIT.pdf
- Appendix 10 – Smart metering costs https://ofgem.gov.uk/system/files/docs/2018/05/appendix_10_-_smart_metering_costs.pdf
- Appendix 11 – Headroom https://ofgem.gov.uk/system/files/docs/2018/05/appendix_11_-_headroom.pdf
- Appendix 12 – Payment method uplift https://ofgem.gov.uk/system/files/docs/2018/05/appendix_12_-_payment_method_uplift.pdf
- Appendix 13 – Renewable tariff exemption https://ofgem.gov.uk/system/files/docs/2018/05/appendix_13_-_renewable_tariff_exemption.pdf
- Appendix 14 – Initial view on impact assessment https://ofgem.gov.uk/system/files/docs/2018/05/appendix_14_-_initial_view_on_impact_assessment.pdf

Document map

This supplementary appendix to the main overview document set out our proposals for the updated competitive reference price approach to setting the initial level of the cap.

Figure 1 below provides a map of the default tariff cap documents published as part of this consultation.

Figure 1: Default tariff cap – policy consultation document map



Links to these documents can be found in the 'Associated documents' section of this document

Contents

1. Introduction

We introduce the updated competitive reference price approach, and explain the process we have followed so far. Although we emphasise some specific points to invite stakeholder views, we welcome feedback on any points discussed in this appendix.

1.1. This consultation seeks stakeholders' view on three potential approaches we could use to set the initial level of the default tariff cap. One of our options is an updated competitive reference price. This would follow the same broad methodology used to establish the existing safeguard tariff. In terms of the methodology it is therefore similar to our option of an adjusted version of the existing safeguard tariff (as described in Appendix 2) – but it could use different companies.

1.2. We would set the price benchmark to represent an efficient level of costs. Suppliers with more competitive prices should be more likely to represent an efficient level of costs, because competition will drive suppliers to cut their prices until these reach the efficient level.

1.3. This appendix sets out our proposal for how we would apply an updated competitive reference price approach, if we were to adopt this approach.

1.4. Compared with the adjusted version of the existing safeguard tariff, using an updated competitive reference price would allow us to use more recent input data, consider the process for selecting which suppliers (and which of their tariffs) to include, and to review any adjustments made. This flexibility could potentially help us ensure that the benchmark better reflects an efficient level of costs. For example, using more recent input data might improve accuracy, if indexation was unable to update an older benchmark precisely in line with changes in costs. We would also be able to consider similar methodological changes as for the adjusted version of the existing safeguard tariff.

1.5. However, this flexibility could introduce uncertainty about whether the resulting benchmark would be a robust and reliable comparator, as it would be a new benchmark. Stakeholders have had more time to assess and understand the existing safeguard tariff (which would form the starting point for the adjusted version of the existing safeguard tariff), as have we.

Process

1.6. We set out our initial thoughts on this model in our fifth working paper which we published on 19 April 2018.[1] This appendix focusses on the criteria we could use for including suppliers in this updated benchmark.

1.7. We will need new data to calculate an updated competitive reference price. Specifically, we need information about the number of customers on each tariff, for suppliers who may be included in the benchmark. We issued a Request for Information (RFI) on 30 April 2018, with a deadline of 18 May 2018. We will analyse this data during the policy consultation period. This appendix therefore sets out how we would approach calculating an updated competitive reference price, rather than reporting initial results for what this might look like in practice.

[1] Ofgem (2018), Working paper #5 – updated competitive reference price. https://www.ofgem.gov.uk/system/files/docs/2018/04/working_paper_5_-_updated_competitive_reference_price.pdf

2. Our proposed approach for setting the cap

In this section, we describe the process we would use to set the initial level of the default tariff cap using an updated competitive reference price, if we were to adopt this approach. This includes selecting tariff data, making exclusions and adjustments, and selecting the benchmark.

2.1. An updated competitive reference price approach would use tariff data from suppliers. The process would involve selecting which suppliers we should use tariff data from – as part of this, we would exclude some suppliers and carry out adjustments to the remaining suppliers' data. Once we had selected suppliers, we would then need to assemble benchmarks, which would form part of the initial level of the cap (covering wholesale costs, social and environmental costs, operating costs and a normal rate of return).

2.2. To construct the benchmark, we require:

- data on suppliers' tariffs; and
- data on suppliers' costs and consumers – to support judgement and adjustments to the tariff data.

Selecting tariff data

2.3. Our criteria for selecting the suppliers to use in the benchmark would be:

- to select suppliers who are pricing competitively;
- to select suppliers who would be relevant as market-wide comparators (after appropriate adjustments); and
- we would also take into account the robustness of supplier data and the benchmark.

Selecting competitive prices

2.4. **We would start with the RFI data on tariff prices and the customer numbers on each tariff.** We would use the data for the tariffs which applied to suppliers' customer bases at the end of 2017, because this is the most recent data from our request.

2.5. We would look at direct debit tariff data only, because we would apply a separate payment method uplift at a later stage (see Appendix 12). As a consequence, the RFI excludes suppliers who predominantly supply prepayment customers. For practical reasons, the RFI also excludes: suppliers with fewer than 50,000 electricity meter points, multi-rate tariffs other than Economy 7, and all multi-tier tariffs (where the unit rate depends on the volume consumed). Depending on the data received, we may also need to exclude specific tariffs for reasons like data quality.

2.6. After the exclusions above, our starting point will therefore be tariff data from nearly 30 suppliers.

Ensuring cost-reflective prices

2.7. For the reference prices selected to be relevant comparators for the market as a whole, they should reflect the costs of an efficient supplier, and their level should not be driven by atypical features of the benchmark supplier's business model. Issues could arise if a supplier's prices do not cover its costs, or if its efficient costs are atypically high or low.

2.8. We would seek to make the benchmark achieve this objective by **excluding suppliers and performing adjustments**. In some cases, it may be possible to make adjustments to suppliers' prices to make them more relevant as a market-wide comparator. However, where this is not possible, we would exclude suppliers from the benchmark. Adjustments and exclusions are therefore two different tools for tackling the same issues.

2.9. We propose to **exclude suppliers on the following grounds**.

- **Customer engagement**: we would exclude suppliers who meet both the following criteria: having more than a quarter of their non-prepayment customers on Standard Variable Tariffs for three or more years, and having less than half of their non-prepayment customers on fixed tariffs. (See issue 1 in the Key Judgements section below for more detail and our reasons why). We would base this assessment on the customer and tariff information collected through the tariff data RFI.

- **Niche business models**: some suppliers may have particular business models that may make it difficult to look at them on a like-for-like basis (eg a supplier with a high proportion of products bundling energy supply with other services). Where a supplier has a distinctive business model, their customer base might also be significantly different to the market as a whole, in a way which is difficult to control for using adjustments. To meet the Domestic Gas and Electricity (Tariff Cap) Bill's requirements, we

cannot make different provision for different suppliers[2] – we therefore need to set a cap level which is as widely applicable as possible. We therefore intend to exclude a number of suppliers from our analysis (see also Appendix 8 on operating costs). We will base this exclusion on qualitative assessment of suppliers' businesses, using the knowledge we have.

Some suppliers focus on renewable energy. We do not at present propose to exclude these suppliers from our analysis as niche business models – this is because we would need to see evidence that these suppliers are incurring materially higher costs. We also do not propose to exclude suppliers who focus on vulnerable customers – although we may consider a tariff adjustment to account for the additional costs of serving vulnerable customers (as we describe later in this section) provided we think it is warranted and feasible.

- **Compliance**: if a supplier was not meeting the requirements set out in its licence, one explanation could be that it was spending too little to ensure compliance (eg to deliver a compliant level of customer service). A supplier in this situation might therefore be able to offer a lower price than other suppliers. Including this supplier in the benchmark could risk meaning that the cap would be set at a level which would not allow an efficient supplier to comply with its licence. The impact would depend on the materiality of the potential cost saving from non-compliance.

  We will continue to consider how to take this into account. One option would be to consider excluding suppliers in relation to whom we have published: a provisional order, notice of intention to impose a financial penalty, or decision to impose a financial penalty.[3] We would only exclude such suppliers where we considered there may have been a material impact on the supplier's costs. We would only exclude suppliers where the conduct related to domestic customers, and happened in the base year (2017 in relation to the updated competitive reference price approach– for all or part of the year), as these are the circumstances where it could be relevant to the level of the cap.[4] We would not exclude suppliers in relation to whom we have opened an investigation, because this does not mean that we have made any findings of non-compliance.

[2] Clause 2(2)(b) of the Domestic Gas and Electricity (Tariff Cap) Bill.
[3] Any such document must have been published before the date at which we issue our final consultation on the initial level of the cap.
[4] If a supplier was non-compliant at an earlier point in time, then this could have affected any fixed tariffs that lasted more than one year. We would expect such tariffs to make up a relatively small proportion of its customer base.

- **Suppliers for which we do not have reliable data**: Data quality varies between companies, and we will only set the level of the cap with reference to companies for which we have reliable data.

QA3.1: Do you agree with our proposed approach for an updated reference price approach? In particular, how we select price data and exclude suppliers or adjust data.

2.10. We would then carry out adjustments to the tariffs of the suppliers in our sample. We would do this where we are confident that in principle the benchmark would be more representative of efficient costs for the market as a whole, and where we are confident that any adjustment would materially improve the accuracy of the benchmark. This second criterion will be reliant on the quality of the data available, and an understanding of how different types of operating costs relate to each other in the round.

2.11. In order to carry out adjustments, we will need to use some information about suppliers' costs, in addition to their tariff data. The extent of the cost data required will depend on the number and type of adjustments we make.

2.12. We intend to make an adjustment for social and environmental costs. Where relevant, we would add an **uplift for the costs of the Warm Home Discount (WHD) and the Energy Company Obligation (ECO)** that would have been incurred by a fully obligated supplier with flat customer numbers (see issue 2 in the Key Judgements section for more detail).

2.13. We are not minded to adjust the initial level of the cap for wholesale costs. (see issue 3 in the Key Judgements section for more detail).

2.14. In Appendix 8 we discuss categories of operating costs that stakeholders have suggested we consider adjusting for. This sets out that there are a number of possible drivers of variation in costs between suppliers which are not related to their relative efficiency or inefficiency, and so where we may consider making adjustments in principle. In the case of this updated competitive reference price model, we would need to consider whether they were material with respect to the suppliers remaining after exclusions, and whether it is proportionate and feasible to adjust for them.

2.15. Our conclusion on whether or not to make adjustments in these areas will partly depend on our analysis of historical costs for suppliers remaining after exclusions. We therefore have not decided at this stage whether or not to carry out adjustments. However, Table A3.1 below sets out how we could make some of the adjustments in practice in the context of this model, if we decided to make them. This is an illustration, which we have provided as a basis for comment. In particular, we have not assured ourselves that the illustrative approaches set out below would be feasible in practice, and have outlined some of our specific concerns in the relevant sections of Appendix 8.

2.16. Several of the potential adjustments would make use of historical cost data, and would be similar to the bottom-up cost assessment. As noted in Appendix 8, we will consider the need for any adjustments to correct for differences in suppliers' operating costs in the round (ie looking across a number of potential adjustments to look at the overall effect on the ultimate level of the cap), rather than looking at adjustments on an individual basis. This is because the impact of different factors could to some extent cancel each other out. Factors could also be correlated – and it may therefore be difficult to disentangle the individual effect of each factor. The decision on whether to make these adjustments will be independent of their treatment in the bottom-up cost approach. This is because the starting point for the operating costs is different in each case.

2.17. We would not apply most of the potential operating adjustments to tariffs directly (eg through backing out costs and replacing them with other figures). Rather, we would calculate how the adjustments would affect each supplier's Earnings Before Interest and Tax (EBIT), and calculate an adjusted EBIT figure in light of this. We would then apply a single adjustment to tariffs, to reflect the difference between a supplier's adjusted EBIT and a normal rate of return – see paragraph 2.18.

Table A3.1: Illustrating how we might approach potential operating cost adjustments to the updated competitive reference price model, if required

Possible cost driver	**Approach to adjustment, if required** (for descriptions of each element, see Appendix 8)
Company size	Use cost data to estimate overheads as a percentage of revenue for an efficient supplier at scale. Calculate the difference (in percentage points) between this estimate and each supplier's overhead percentage. Multiply each supplier's difference by its revenue to turn this into an absolute figure. Adjust EBIT accordingly.
Customer acquisition costs	Standardise treatment of customer acquisition costs, so that they are amortised over the same period of time. For each supplier, calculate the difference in its customer acquisition costs between its own data and the standardised treatment. Adjust EBIT accordingly.
Stage of smart meter rollout	See Appendix 10.
Payment method breakdown	Apply uplift to benchmark calculated based on direct debit tariffs. See Appendix 12 for more detail.
Proportion of vulnerable customers	Use cost data to calculate the additional cost to serve for a vulnerable customer (note that we have particular concerns about whether this will be possible in practice). Calculate a proxy for the proportion of vulnerable customers with each

Possible cost driver	**Approach to adjustment, if required** (for descriptions of each element, see Appendix 8)
	supplier (eg using Priority Services Register data). Calculate the market average proportion of vulnerable customers. Calculate percentage point difference in the proportion of vulnerable customers between each supplier and the market average. Turn this into an absolute value through multiplying by each supplier's customer numbers, and then multiply by the additional cost to serve for a vulnerable customer. Adjust EBIT accordingly.
Proportion of dual fuel and electricity-only customers	Use cost data to calculate the additional cost to serve for single fuel customers. Calculate the proportion of single fuel customers for each supplier (using the tariff data RFI), and calculate the market average. Calculate the percentage point difference between each supplier and the market average. Turn this into an absolute value through multiplying by each supplier's customer numbers, and then multiply by the additional cost to serve for an offline customer. Adjust EBIT accordingly.

2.18. Finally, following any adjustments, we would **calculate the revenue increase or reduction required to reach a normal rate of return for each supplier**, taking into account its trading arrangements.[5] We would use accounting information from suppliers to calculate a supplier's current EBIT margin, take into account the effect of any adjustments, and then compare it against the EBIT margin reflecting a normal rate of return. We would adjust each supplier's tariffs accordingly (we will consider whether it is practical and desirable to carry out separate adjustments for gas and electricity).

2.19. This could address the concerns from some respondents to working paper 1 that suppliers in the sample may be loss-making. In response to working paper 5, one supplier said that there was an inconsistency between using an efficiency frontier (ie the supplier with the lowest costs) and adjusting to achieve a normal rate of return. We do not consider that this is the case – while a supplier may be able to earn a higher rate of return temporarily through being more efficient than other suppliers, we would expect an efficient supplier to earn a normal rate of return over time, as any advantages would be competed away. We also note that we are not proposing to just select the supplier with the lowest costs – see Key Judgement 5 below.

2.20. Once we had adjusted tariffs, we would then **remove network charges**. This is because we want to apply the correct network charges[6] for each region separately, given that suppliers have different regional distributions of customers. For electricity, we would simply remove the relevant network charges for each region. Our RFI data

[5] See Appendix 9 on EBIT margin for our discussion of a normal rate of return.
[6] Network charges are set out in network companies' charging statements.

is based on electricity regions, and so for gas there would be an additional step of mapping electricity regions to gas Local Distribution Zones (LDZs). We would use the same mappings as the Competition and Markets Authority (CMA) used for the prepayment safeguard tariff methodology[7]. We would then remove the relevant gas network charges.

2.21. We would use the adjusted tariff data to calculate the price at typical consumption for each tariff. We would then calculate the average price at typical consumption separately for each supplier, weighting each tariff by the number of customers on it. We need customer base information to weight tariffs. We therefore disagree with the suggestion from one supplier in response to working paper 5 that we should look at the wholesale costs of tariffs on sale, rather than those in the customer base. When doing this, we would include both single and dual fuel tariffs. We would rank suppliers based on their average adjusted prices at typical consumption.[8]

Selecting the benchmark

2.22. We would then **select suppliers with the lowest average adjusted prices at typical consumption**. This would mean that we were selecting the suppliers who have the lowest prices which are reflective of efficient costs of supply. Specifically, we are minded to include at least two suppliers in the benchmark, and at most, half of the remaining suppliers (after exclusions) (see issue 4 in the Key Judgements section below for more detail). We would be ranking prices separately for single fuel electricity, Economy 7 electricity, and gas. This means that we could end up with different suppliers in the benchmark for each fuel.

2.23. Once we had selected suppliers, we would **calculate the benchmark at typical consumption by taking a simple average** across the average adjusted prices at typical consumption for the suppliers in the benchmark. (See issue 5 in the Key Judgements section below for more detail).

2.24. **For the benchmark at nil consumption, we would use tariff data from the same suppliers** making up the benchmark at typical consumption. We would calculate the benchmark in a similar way, based on a simple average of their average adjusted standing charges.

2.25. At the end of the process, we would therefore have benchmarks at nil consumption and typical consumption for: single rate electricity, Economy 7 electricity and gas. These would incorporate: wholesale costs, social and

[7] See the 'mappings' tab of: https://www.ofgem.gov.uk/system/files/docs/2018/02/prepayment_price_cap_calculations_network_charges_v1.6.xlsx

[8] We would use the current typical domestic consumption values. These are different to the historical typical domestic consumption values used to define the prepayment safeguard tariff.

environmental costs, operating costs, and a normal rate of return. We would add network costs, payment method uplifts and any headroom separately.

3. Key judgements

In this chapter, we discuss the key judgements behind our design. These relate to: customer engagement, adjusting for policy costs, adjusting for wholesale costs, the number of suppliers selected, and the weighting of suppliers within the initial benchmark.

Issue 1: Customer engagement

3.1. We would set the price benchmark to reflect an efficient level of costs. Suppliers with more competitive prices should be more likely to represent an efficient level of costs, because competition will drive suppliers to cut their prices until these reach the efficient level – in contrast, suppliers with less competitive prices may not be subject to the same degree of pressure to reduce costs.

3.2. In response to working paper 5, one stakeholder said that suppliers should still have incentives to become more efficient to maximise their profits, whether or not they are in the more competitive segment. Tariff data itself does not tell us whether a particular supplier with less competitive prices has an efficient level of costs or not. However, because we are using price data to estimate an efficient level of costs, we need to look at the suppliers where any efficiency gains would be reflected in their prices (ie those in the more competitive segment).

3.3. To select competitive prices, we intend to use customer engagement as a criterion. We want to use suppliers whose tariffs can provide a reasonable proxy for the prices that would be seen in a competitive market. We therefore want to limit the extent to which the prices charged to less engaged consumers are used in the benchmark, as these prices are less likely to have been driven to an efficient level through competition. In response to the first working paper, one stakeholder told us that we should recall the CMA's finding of significant inefficiency for certain suppliers,[9] which would be reflected in their costs.

3.4. We received mixed views on this issue in response to working paper 5. One supplier said that it could see the logic for screening out suppliers with a low level of customer engagement. Another supplier said that it agreed with our suggestion in the working paper that we should select suppliers with a high level of customer engagement. However, some other suppliers disagreed. For example, one supplier said that excluding suppliers could increase the risk of making inappropriate cost comparisons. We note that we can reduce this risk by performing adjustments to the cost data for the suppliers we include. Another supplier said that customers can engage in other ways (eg signing up for a rewards programme or registering for the

[9] See, for example: CMA (2016), Energy Market Investigation – final report, paragraph 202. https://assets.publishing.service.gov.uk/media/5773de34e5274a0da3000113/final-report-energy-market-investigation.pdf

Priority Services Register). For our current purposes, we are looking at which tariff data to include. We therefore consider that consumers' engagement when selecting a tariff is the most reliable proxy for engagement, rather than looking at other activity on a customer's account.

Options considered

- Option 1: Only include fixed-term tariffs in an updated benchmark.
- Option 2: Only include suppliers with a high proportion of non-prepayment customers on fixed term tariffs – we propose to define this as at least half. We can calculate the proportion using the tariff data RFI.
- Option 3: Only include suppliers with only a small fraction of non-prepayment customers who have been on a SVT for more than three years – we propose to define this as at most a quarter. We can calculate the proportion using the tariff data RFI.
- Option 4: Combine the criteria under options 2 and 3, so that a supplier would only be excluded if they failed to meet both criteria.

Our minded-to position

3.5. We would be minded to use option 4, which would exclude suppliers who meet both the following criteria: having more than a quarter of their non-prepayment customers on Standard Variable Tariffs for three or more years, and having less than half of their non-prepayment customers on fixed tariffs.

Rationale and analysis

3.6. Customers who have selected a fixed-term tariff are showing that they are engaged. However, suppliers may not always price fixed-term tariffs to allow them to make a normal rate of return, and it would be difficult to apply a specific adjustment to these tariffs to address this. We therefore do not consider that only including fixed-term tariffs (option 1) is viable. In response to working paper 5, several suppliers told us that it would be inappropriate to include fixed tariffs only. For example, one supplier noted that fixed tariffs are used as acquisition vehicles by many suppliers.

3.7. Another option is to only include suppliers with a high proportion of customers on fixed-term tariffs (option 2). This would provide one measure of how many customers are engaged. However, we recognise that some smaller suppliers may compete using variable tariffs, and so it is possible for an engaged customer to select a variable tariff. This was also noted by one supplier in response to working paper 5. Another supplier said that some customers may prefer the flexibility of its default variable tariff.

3.8. We could look at the proportion of a supplier's customers who have been on an SVT for more than three years, and include suppliers where this only represents a small fraction of their customer base (option 3). This would mean that we would be reducing the impact of customers who are unlikely to have made an active decision over their energy supply recently. In response to working paper 5, two suppliers said that this was their preferred metric.

3.9. However, this metric alone would still mean that the majority of a supplier's customer base might not have made an active decision over their tariffs recently. It would also only be a proxy for consumer engagement, as a consumer could always have chosen to stay on a variable tariff for a period of time (eg if it was with a supplier with a less expensive SVT).

3.10. Looking at both criteria (option 4) is a conservative approach, which attempts to address some of the risks noted under options 2 and 3 above, by excluding fewer suppliers. As a result of this option, we would not be excluding a supplier who relied on variable tariffs, but where the majority of its customers had still made an active decision over their energy tariff recently (ie in the last three years). We would also not be excluding a supplier who had acquired the majority of its customers on fixed tariffs, but who also had a sizeable minority of legacy customers on SVTs.

3.11. We have also selected our proposed criteria on a conservative basis. We recognise that it is difficult to define precise parameters, but we consider that these values are sufficiently conservative so as to reduce the risk of incorrectly excluding a supplier.

Issue 2: Adjustment for policy costs

Issue

3.12. Appendix 7 explains all the environmental and social schemes which have an impact on suppliers' costs. Most of them apply to all suppliers, so will be included in our reference price irrespective of which suppliers we use. However, some suppliers do not face all obligations. Specifically, WHD and ECO only apply to suppliers, once they reach a certain size, above a certain threshold, and suppliers only face a full ECO obligation after a further taper period. Where our sample includes suppliers who are not fully obligated, we would need to make an adjustment.

3.13. Furthermore, a supplier's obligation for these schemes is determined before the start of a scheme year. If a supplier's customer numbers then change, its effective cost per customer will also change. In particular, if a supplier's customer numbers increase significantly after its obligation is determined, the effective cost per customer will fall – the supplier might therefore be able to set lower prices and still cover its WHD and ECO costs. However, this would not be possible for suppliers as a whole, because all suppliers cannot grow significantly at once.

3.14. We want to develop a benchmark which reflects the costs of an efficient supplier at scale, with flat customer numbers. We therefore need to adjust for these schemes.

Options considered

- Option 1: Replace all the actual social and environmental costs of suppliers with those of suppliers who are fully-obligated (as under the prepayment safeguard tariff methodology). This adjustment would therefore cover all schemes.

- Option 2: Replace all the actual social and environmental costs with an estimate based on another source, such as scheme administration data. This adjustment would therefore cover all schemes. This would be similar to the approach we would use under a bottom-up cost assessment.

- Option 3: Add an uplift only for those specific schemes which vary between suppliers of different sizes (ECO and WHD). We would estimate the costs of these schemes using scheme administration data, to calculate a cost per customer for a fully-obligated supplier with flat customer numbers. We would not make any adjustment in relation to other schemes.

    - Where a supplier was below the thresholds for these schemes, we would simply add the per customer cost of the schemes to its tariff data.

    - Where a supplier was fully above the thresholds for these schemes, we would adjust based on its change in customer numbers between the point the obligations were set and the date of the initial benchmark (December 2017). We would calculate the adjustment as: the cost per customer, multiplied by the change in customer numbers, divided by the supplier's customer numbers in December 2017.

    - Where a supplier was partially obligated, we would estimate the difference between its current estimated costs and the fully-obligated level, taking into account both its size, and any changes in customer numbers between the point the obligation was set and December 2017. We would then turn this difference into a per customer figure, and add this to its tariff data.

Our minded-to position

3.15. We are **minded to use option 3, and apply an uplift for the costs of ECO and WHD** where the sample supplier does not incur the full costs of these schemes.

Rationale and analysis

3.16. Option 3 is the most targeted approach, as it only would only involve adjustments for the schemes which do not apply to all suppliers. While all three approaches should arrive at similar answers in principle, there is an argument for limiting the scope of any adjustments, to reduce the risk of unintended consequences. For example, this means that we would not be dependent on needing suppliers' own cost data to remove their own environmental and social obligations. This means that option 3 is our preferred option.

3.17. If we were to replace suppliers' entire policy costs, then using scheme data (option 2) would appear preferable to substituting another supplier's costs (option 1). For many costs, there is a specified methodology where suppliers do not have direct control over the costs, and so using this would be a more direct approach. For other costs where suppliers do have an element of control, option 2 should allow us to look across a wider range of suppliers, and ensure that we are setting the benchmark at an efficient level.

Issue 3: Adjustment for wholesale costs

Issue

3.18. Stakeholders have raised some concerns about wholesale costs, such as purchasing decisions which turn out to be fortuitous, suppliers having differing costs to engage in the market, and concerns that suppliers purchase energy for different tariffs at different times.

Options considered

- Option 1: Do nothing.
- Option 2: Remove a supplier's own wholesale costs (preferably as forecast at the time of pricing, or as actually incurred). Replace them with a view of wholesale costs based on market data, potentially including an allowance for other costs (eg transaction costs).

Our minded-to position

3.19. We are **minded not to make an adjustment for wholesale costs** (option 1).

Rationale and analysis

3.20. We have not identified a compelling reason why we would want to make adjustment for wholesale costs under an updated reference price approach.

3.21. In response to working paper 5, one supplier said that the timing of wholesale purchases would depend on each supplier's hedging strategy. We agree that wholesale purchasing strategies may vary between suppliers. However, we note that the averaging effect (of calculating average prices for each supplier, and then averaging across suppliers in the benchmark), should reduce the extent to which our benchmark would represent an extreme in any direction.

3.22. Another supplier pointed to the difference between the way in which the initial level of wholesale costs would be set and the way this would be updated over time. We note that an updated competitive reference price is not the only model available to us. If developing a standardised approach to wholesale costs was considered important, then we might want to select a bottom-up approach instead.

3.23. Furthermore, even if we did consider that an adjustment had merit in principle, it would be challenging to carry it out in practice. For example, given we are looking at price data, we would ideally want to remove the wholesale costs that a supplier forecast at the time it was taking pricing decisions for a product. However, this is not a value in suppliers' accounting data, and is unlikely to be available in a consistent way. When adding back in wholesale costs, we would have the same challenges as when developing an estimate of wholesale costs under a bottom-up approach. In response to working paper 5, several suppliers recognised the difficulty of applying adjustments for wholesale costs under a reference price approach. One supplier said that this could be a reason for including more suppliers in the benchmark – we agree that this may be one factor influencing our view on how many suppliers to include.

Issue 4: Number of suppliers selected in the final benchmark

Issue

3.24. We will consider robustness throughout the process. However, we will need to consider how reliable our results will be, taking into account factors like the comparability and quality of data, and the number of suppliers included in the benchmark.

3.25. For example, the number of suppliers included in the benchmark could be one way of influencing its robustness. However, we would also need to bear in mind that changing the number of suppliers in the benchmark would also affect how close the benchmark was to an efficient level of costs (where there were differences in how competitively these companies were pricing).

3.26. As we make decisions on data gathering and exclusions, we would be reducing the number of suppliers who could be included in the benchmark. However, towards the end of the process, we still need to decide how many of these suppliers we actually include in the benchmark. We would do this based on their ranked price data.

Options considered

- Option 1: Include the supplier with the lowest price after adjustments.
- Option 2: Include the two suppliers with the lowest prices after adjustments.
- Option 3: Include 50% of the suppliers remaining after exclusions, selected based on those with the lowest prices after adjustments.
- Option 4: Include all suppliers remaining after exclusions.

Our minded-to position

3.27. We are **minded to include at least two suppliers in the benchmark, and at most half of the remaining suppliers (after exclusions)** (ie option 2, option 3, or somewhere in between). Our final position will represent a judgement on which option we consider will deliver the most robust benchmark.

Rationale and analysis

3.28. Choosing the number of suppliers would be a question of balancing different considerations. On the one hand, including a larger number of suppliers would mean that each individual supplier would represent a smaller proportion of the benchmark. This might increase confidence that the benchmark was representative, and reduce the impact of any decisions about supplier-specific adjustments. This includes any decisions not to make adjustments – including more suppliers could help to mitigate the impact of any significant non-efficiency drivers where it is not practical to make an adjustment. We could therefore use the choice of the number of suppliers as an alternative to making adjustments. On the other hand, including a smaller number of suppliers would allow us to focus on understanding the data for the candidate suppliers and considering any factors which may require adjustments. We might therefore gain greater confidence in the data.

3.29. Selecting the cheapest supplier after adjustments (option 1) would mean that we were as close as possible to the efficiency frontier. This would mean that we were delivering as much consumer protection as possible. However, because we would be relying on one supplier, any errors in the design could lead to us setting the benchmark below an efficient cost. On balance, we currently think that this option may be risky. We note that the CMA used two suppliers for its prepayment safeguard tariff methodology.

3.30. In response to working paper 5, one supplier said that we should include a broader cross section of suppliers to give a more rigorous approach to identifying an efficient level of costs. Another supplier said that we should include "as many suppliers as possible from a wide range of sizes, including from ex-incumbents". However, if we included all suppliers remaining after exclusions (option 4), we could end up setting the benchmark a long way from the efficiency frontier. This is given

that all remaining suppliers would be influencing the level of the benchmark. We have concerns that this would not deliver a sufficient level of consumer protection.

3.31. Including two suppliers (option 2) would reduce the risk of setting the benchmark too low based on issues with any one supplier. However, as we would only be averaging over two suppliers, there would still be more risk compared to a benchmark using a larger number of suppliers. In response to working paper 5, one supplier said that the optimum number of suppliers would be more than two, but recognised that using too many suppliers risks creating an unwieldy benchmark.

3.32. If we included the cheapest 50% of the remaining suppliers (option 3), this would ensure that only the most efficient half of suppliers were influencing the level of the benchmark. It would therefore still deliver some degree of consumer protection, while significantly removing the impact of any issues with individual suppliers in the benchmark.

3.33. In response to working paper 5, one supplier told us that the ranking of suppliers in terms of their costs would vary over time. It said that selecting the suppliers with the lowest prices at a particular point in time would not be sustainable – for example because suppliers could be at different points in an investment-innovation cycle. It said that we should include a sufficiently large set of suppliers so that variables such as this would average out. We have not seen conclusive evidence on this point, but we recognise the general point that including a larger number of suppliers will reduce the impact of any supplier-specific factors. However, in a competitive market, if a supplier had higher costs due to its investment cycle, it would not be able to pass these through to consumers. (We note that some elements of operating costs may be cyclical in Appendix 8).

Issue 5: Weighting of suppliers within the initial benchmark

Issue

3.34. Once we have selected which suppliers to include, there is also a question of whether to weight them to construct the benchmark. This is a question in every case where we decide to include more than one supplier in the benchmark. This is because we will have an adjusted average price for each supplier, but we want to consolidate these into a single benchmark value.

Options considered

Option 1: Take a simple average, where each supplier included would have the same weight.

Option 2: Weight each supplier's average price by its number of customers.

Our minded-to position

3.35. **We are minded to use a simple average** to weight the suppliers included in the benchmark, so that they have equal weight.

Rationale and analysis

3.36. Weighting each supplier included in the benchmark by its number of customers could have potential advantages if we thought that there were residual concerns about the comparability of suppliers (even after any adjustments and exclusions). In this case, it could be argued that suppliers who represent a greater proportion of the market could be more relevant as market-wide comparators, and therefore should have a higher weight.

3.37. However, given the range of sizes of suppliers in the market, there could be a risk that this approach might lead one supplier to dominate the benchmark calculation.[10] Using a simple average would help to address this, and would be a more straightforward approach. As noted, we would we would already have performed exclusions and adjustments to try to ensure that the suppliers used to calculate the benchmark are relevant as market-wide comparators.

3.38. Suppliers had mixed views on this issue in response to working paper 5. Some suppliers said that we should adopt a simple average. Other suppliers said that we should use a weighted average. One supplier told us that we should weight suppliers by sociodemographic variables to ensure that the benchmark is representative. As set out in the earlier section on our proposed approach to setting the cap, we are considering whether to make various adjustments - we consider that this would be a less complex way of addressing any concerns about representativeness, rather than applying weighting at the end of the process.

QA3.2: Do you agree with the judgements we set out regarding consumer engagement, policy and wholesale costs, and constructing the benchmark?

[10] This would depend on the relative sizes of the suppliers included in the benchmark.

4. Approach to nil consumption

In this section, we describe how we would set the initial level of the cap at nil consumption under an updated competitive reference price approach.

Approach to nil consumption

Issue

4.1. We are proposing to define the price cap at two points: nil consumption and typical consumption. The discussion above covers how we would set the benchmark at typical consumption using an updated competitive reference price approach. However, we also need to consider how to set the benchmark at nil consumption.

Options considered

- Option 1: Set the benchmark at nil consumption using the adjusted tariff data from the same suppliers included in the benchmark at typical consumption. Specifically, we would be using their adjusted standing charges.

- Option 2: Use the adjusted tariff data to select the suppliers with the cheapest adjusted standing charges (who might not be the same as those included in the benchmark at typical consumption).

- Option 3: Set the benchmark at nil consumption using a different method (i.e. a bottom-up cost assessment).

Our minded-to position

4.2. We are minded to set the benchmark at nil consumption **using the adjusted tariff data from the same suppliers included in the benchmark at typical consumption** (option 1).

4.3. We would use the adjusted standing charges to represent the benchmark. Any headroom would be additional to this, rather than being calculated as part of the adjusted standing charges. (This is different to our proposed approach for the adjusted version of the existing safeguard tariff. The reason is that we are selecting the suppliers in the benchmark at nil consumption based on a ranking exercise, which was not the case for the adjusted version of the existing safeguard tariff. See Appendix 2 for more information about the approach to nil consumption under the adjusted version of the existing safeguard tariff).

Rationale and analysis

4.4. The benchmark at nil consumption is equivalent to a standing charge. We will have adjusted standing charge data through our work to develop the benchmark at typical consumption under an adjusted competitive reference price approach.

4.5. We could rank the adjusted standing charges, and select the lowest values (option 2). This would deliver the lowest possible standing charge, and could therefore deliver particular benefits to consumers who consume below-average volumes of energy.

4.6. However, ranking standing charges in isolation could risk setting the benchmark below the costs of an efficient supplier. Suppliers may have different pricing approaches which affect how they set their standing charges and unit rates. If we selected the suppliers with the lowest average standing charges (after adjustments), this might identify suppliers whose pricing policies involve low standing charges (and high unit rates), rather than necessarily suppliers who are most efficient.

4.7. Using the same suppliers as in the benchmark at typical consumption (option 1) reduces the impact of suppliers' approaches to pricing the standing charge and unit rate, and is more internally consistent than option 2. We should be selecting the most efficient suppliers through ranking the average adjusted prices of suppliers at typical consumption. We would therefore still be doing as much as possible to ensure that the benchmark at nil consumption reflects efficient costs, and therefore helps to protect consumers with below-average consumption.

4.8. We could calculate the benchmark at nil consumption in a different way to the benchmark at typical consumption (option 3). We have not identified a particular advantage of doing this, and we think that it would be better to be consistent in how we set the benchmarks at nil consumption and typical consumption. If we were using the bottom-up cost assessment to calculate the benchmark at nil consumption, then we would probably also want to use it to calculate the benchmark at typical consumption.

QA3.3: Do you agree that, under an updated competitive reference price approach, we should set the benchmark at nil consumption using the adjusted standing charges from the same suppliers included in the benchmark at typical consumption?

5. Approach for updating the cap

In this section, we outline how we would update the cap. We cover indexation and weighting.

Indexation

5.1. The benchmarks developed above would be for December 2017 – this would be the base period for the cap.

5.2. Under an updated competitive reference price models, we would then use the same cost indices as proposed for the other models. We discuss these in Appendix 5 on updating the cap over time.

5.3. In addition to choosing the indices, we also need to select weights for them. This is because we use different approaches to index different cost components. The price reference approach does not split the benchmark into separate cost components, so we have to estimate these. We discuss the general approach to this below. We then cover specific issues relating to weighting at nil consumption and for Economy 7 customers.

Weighting – general approach

Issue

5.4. An updated competitive reference price approach would provide benchmarks at nil consumption and typical consumption. These incorporate wholesale costs, social and environmental costs, operational costs, and a normal rate of return.

5.5. However, to update these benchmarks over time using indices, we need to have estimates for the proportion of each benchmark which each cost represents. This would enable us to apply the relevant index. The reference price approach itself does not provide us with suitable weights, so we need to look for another source.

Options considered

- Option 1: We could use the results of our bottom-up cost assessment. This will develop estimates for the size of the relevant cost categories. There are two ways in which we could use this information.
    - Option 1a – We could use the analysis from the bottom-up cost assessment to calculate percentages. (For example, wholesale costs as a percentage of the benchmark calculated using the bottom-up cost assessment). We would then apply these percentages to the

benchmark developed through the updated competitive reference price approach.

- Option 1b – Alternatively, we could use the absolute values developed under the bottom-up cost assessment for wholesale costs, and environmental and social costs. We would subtract these from the updated competitive reference price benchmark. The residual would be treated as an estimate for operational costs and the normal rate of return.

- Option 2: An alternative would be to use the information available through the Consolidated Segmental Statements (CSS). This would allow us to calculate percentages for each cost category.

5.6. Under this option, we would adjust the raw CSS data. Given that suppliers treated WHD costs in different ways, the CMA performed an adjustment to ensure that these costs were reflected appropriately.[11] Our CSS guidelines instruct suppliers to deduct the WHD from revenues directly.[12] We would therefore add WHD costs to the environmental and social cost category, so that we can index changes in the cost of WHD.

Our minded-to position

5.7. We are **minded to use option 1b**.

5.8. We need to apply different weights at nil consumption and for Economy 7 customers at typical consumption, taking into account that some costs vary with consumption and some do not. We discuss these issues separately below.

Rationale and analysis

5.9. Under option 1b, we would be making the assumption that the absolute values for wholesale costs, and environmental and social costs, would reflect the costs that would have been incurred by the suppliers in our benchmark calculated using the updated competitive reference price benchmark approach. In principle, this should be a reasonable assumption, given that these are direct costs. Whether this is correct in practice relies on the accuracy of our estimates. The same issue would be true for option 1a, but in that case we would also be relying on the accuracy of our operating cost estimates. Option 1b would also mean that our weighting was taking into

[11] CMA (2016), Energy market investigation – final report, paragraph 14.141, footnote 79. https://assets.publishing.service.gov.uk/media/5773de34e5274a0da3000113/final-report-energy-market-investigation.pdf
[12] https://www.ofgem.gov.uk/sites/default/files/docs/2015/05/css_guidelines_jan_2015.pdf

account the operating costs for the suppliers in the benchmark. On balance, we therefore consider that option 1b is preferable to option 1a.

5.10. Under option 2, we would be using information from a more limited set of suppliers, compared to the data available through our bottom-up cost assessment. These suppliers may or may not represent an efficient level of costs, which may also affect how their costs split between different categories. While this would be a simple approach, and may be viable as a backstop, it is not our preferred approach at present because it may be less accurate.

Weighting at nil consumption

5.11. The existing safeguard tariff methodology indexed the electricity cap at nil consumption by defining wholesale costs to be equal to be zero, as they scale with consumption, and maintaining the ratio between policy and other costs used at typical consumption.

5.12. As described in Appendix 7 most environmental and social costs scale with consumption, as opposed to the number of customers a supplier has. The majority of social and environmental costs are therefore zero at nil consumption.

5.13. We are minded to apply a zero weighting for social and environmental costs at nil consumption. We will therefore be treating the benchmark at nil consumption as made up of operating costs, which we will index using the Consumer Prices Index including owner-occupier housing costs (CPIH).

5.14. We considered whether we should make an exception for WHD costs, which depend on a supplier's number of customers, rather than the volume it supplies. However, WHD costs are a relatively small amount of total policy costs (see appendix 7). We are therefore minded to not make an exception for WHD costs.

5.15. This position applies across both the updated competitive reference price model, and the adjusted version of the existing safeguard tariff method.

QA3.4: Do you agree with our approach to weighting the benchmark at TDCV and nil consumption?

Economy 7 weighting

5.16. In the existing safeguard tariff cap methodology, policy and 'other' costs are assumed to be the same across single-rate and Economy 7 electricity. The difference between the benchmarks for single rate and Economy 7 electricity was assumed to be due to differences in wholesale costs.

5.17. Economy 7 customers have a higher typical consumption than single-rate electricity customers. As most social and environmental costs vary with the volume

of energy consumed (with the exception of WHD costs), these costs will be higher for a typical Economy 7 customer than for a typical single-fuel electricity customer.

5.18. We are therefore minded to take into account how environmental and social costs vary with consumption for Economy 7 customers when setting the weighting.

- For the updated competitive reference price model, we would implement this by calculating the social and environmental costs which would apply for a consumer with typical Economy 7 consumption.

- For the adjusted version of the existing safeguard tariff, our precise implementation approach would depend on the data source we use to set the initial weights.

6. Responses to stakeholder feedback

We provide a summary of the responses to our working papers in relation to the updated competitive reference price approach and any additional stakeholder feedback received to date.

6.1. In this section, we note additional key points raised in responses from stakeholders, which we have not discussed in previous sections.

Additional key feedback from working paper 5

6.2. Several suppliers made points in relation to entrant and growing suppliers. One supplier said that the pricing strategies of the newest suppliers would not have been proven to be sustainable. Another supplier said that growing suppliers would not have incurred certain costs such as home moves. One supplier said that we should exclude any supplier who has not been trading for at least a year. We agree that this might be a sensible precaution for practical reasons – but beyond this, we do not agree that a supplier's growth is in itself a reason to exclude it. Growing suppliers may incur some costs to a greater extent (eg onboarding customers), and others to a lesser extent (eg sending contract renewals) – this may average out.

6.3. Some suppliers said that we should exclude suppliers based on their size.

- One supplier said that we should exclude suppliers with fewer than 50,000 customers as they are not subject to certain regulations, for example because these suppliers are exempt from offering a wide range of payment methods. We have already excluded such suppliers from our data gathering for practical reasons.

- Another supplier said that we should exclude suppliers with fewer than 250,000 customers, which is the obligation threshold for certain environmental and social schemes, and any suppliers who have not been at this scale for over a year. As set out above, we propose to make an adjustment for environmental and social costs which do not apply to all suppliers – we therefore do not consider that we should exclude suppliers on this basis.

6.4. Two suppliers said that we should exclude loss-making tariffs - one of these suppliers said that these would be non-cost reflective. We do not agree that this is necessary, because we would be looking at a supplier's average prices, after an adjustment to ensure each supplier is making a normal rate of return.

6.5. Two suppliers said that we should look at whether tariffs are available through Third Party Intermediaries or Price Comparison Websites. For example, one supplier said that tariffs which were not available in this way would not be representative of the costs of competing in the market. We do not agree that we should focus on one

customer acquisition channel – in principle, a supplier could be efficient and acquire customers through another means. Similarly, another supplier said that selected suppliers should sell through a wide range of channels. We disagree that this is a necessary condition for a supplier to be relevant as a market-wide comparator, as a supplier could focus on one acquisition route at scale.

7. Consultation response and questions

We want to hear from anyone interested in this document. Send your response to the person or team named at the top of the front page.

We've asked for your feedback in each of the questions throughout it. Please respond to each one as fully as you can. The full list of consultation questions is available in Chapter 7 of the main consultation document.

Unless you mark your response confidential, we'll publish it on our website, www.ofgem.gov.uk, and put it in our library. You can ask us to keep your response confidential, and we'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004. If you want us to keep your response confidential, you should clearly mark your response to that effect and include reasons.

If the information you give in your response contains personal data under the Data Protection Act 1998, the Gas and Electricity Markets Authority will be the data controller. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. If you are including any confidential material in your response, please put it in the appendices.

Chapter 2 - Our proposed approach for setting the cap
Question A3.1 Do you agree with our proposed approach for an updated price reference approach? In particular, how we select price data and exclude suppliers or adjust data.

Chapter 3 - Key judgements
Question A3.2 Do you agree with the judgements we set out regarding consumer engagement, policy and wholesale costs, and constructing the benchmark?

Chapter 4 – Approach at nil consumption
Question A3.3 Do you agree that, under an updated competitive reference price approach, we should set the benchmark at nil consumption using the adjusted standing charges from the same suppliers included in the benchmark at typical consumption?

Chapter 5 - Approach for updating the cap
Question A3.4 Do you agree with our approach to weighting the benchmark at TDCV and nil consumption?