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Default Tariff Cap: Policy Consultation

Appendix 8 - Operating costs

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 estimating an efficient level of suppliers' operating costs for the purpose of setting and updating 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

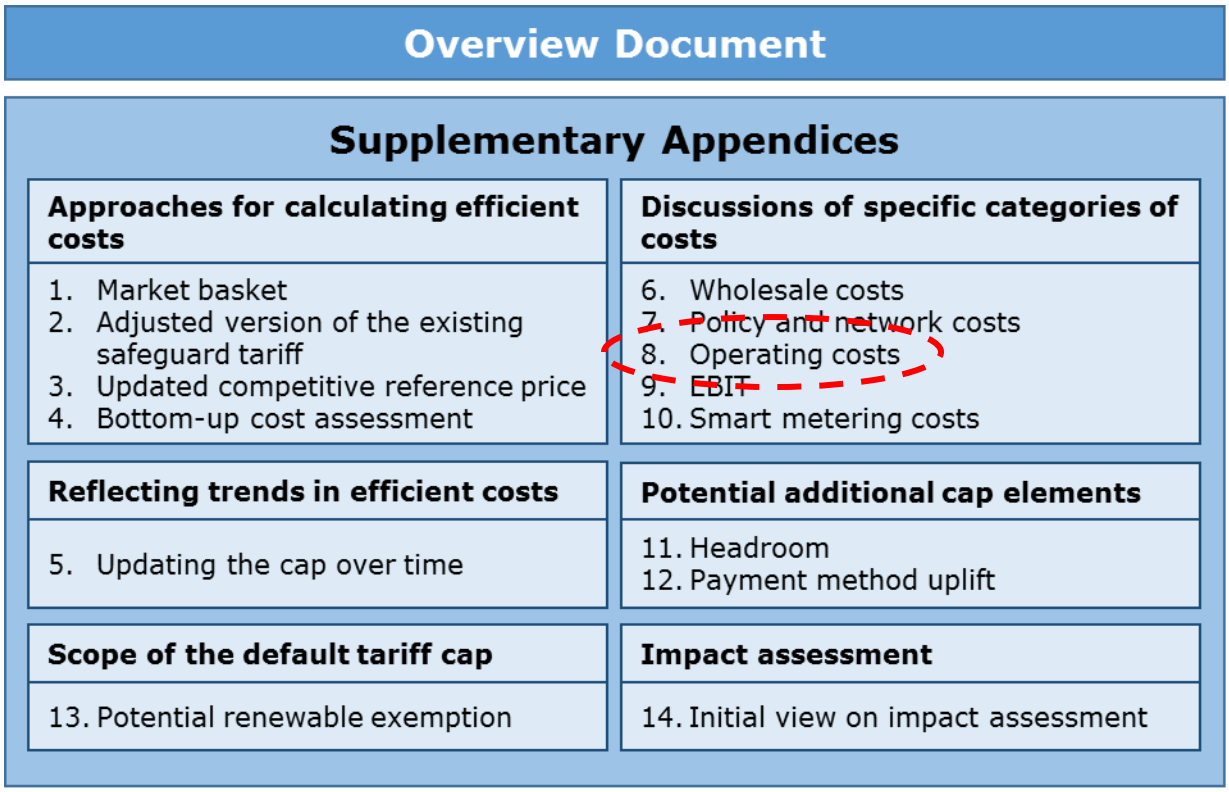
- Appendix 1 - Market basket: https://ofgem.gov.uk/system/files/docs/2018/05/appendix_1_-_market_basket.pdf
- Appendix 2 - Adjusted version of the existing safeguard tariff https://ofgem.gov.uk/system/files/docs/2018/05/appendix_2_-_adjusted_version_of_the_existing_safeguard_tariff.pdf
- Appendix 3 – 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 sets out our proposals in relation to estimating an efficient level of suppliers' operating costs for the purpose of setting and updating 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. Background

In this chapter, we describe what we mean by operating costs.

1.1. We define operating costs as the costs a supplier incurs in retailing energy, distinct from those costs which it incurs on its customers' behalf (ie the cost of purchasing energy, the cost of meeting environmental and social obligations, and network charges). We have summarised the different types of costs – and the scale of each of the different categories for gas and electricity - in the figures below.

Figure A8.1a: Components of suppliers' operating costs 2017 - Gas

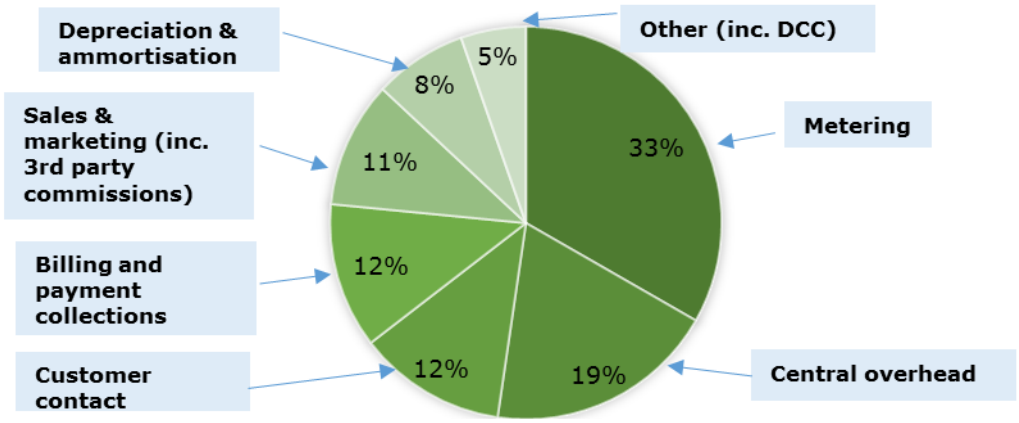
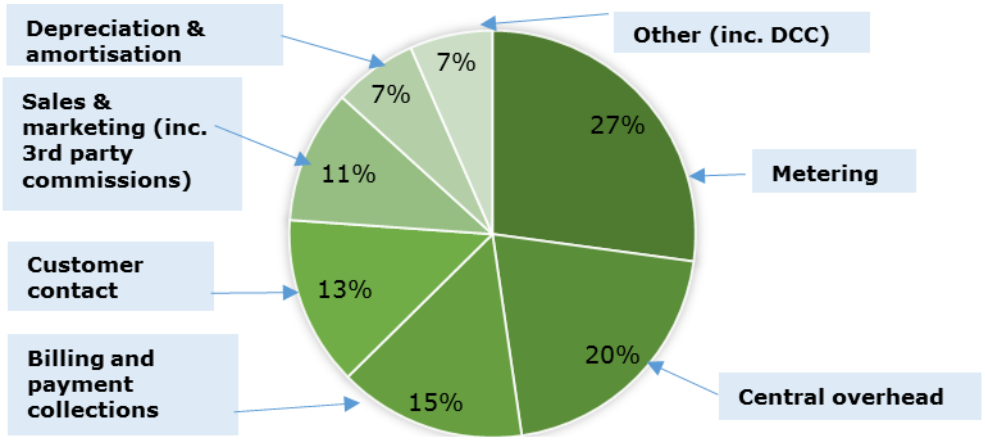


Figure A8.1b: Components of suppliers' operating costs 2017 - Electricity



Source: Ofgem analysis of suppliers' data

Note: the allocation of costs between categories requires significant discretion, and therefore these estimates should be treated with caution. All estimates are based on our provisional analysis of suppliers' data, and subject to change as we continue to refine our analysis.

1.2. These costs are typically - although not exclusively - 'indirect', in that expenditures on services like call centres and billing systems are often shared across the customer base, rather than being attributable to any single account. The majority of these costs would be expected to fall into the 'indirect costs' line in the large companies' consolidated segmental statements.[1] Historical capital expenditure (eg on IT systems) may also be captured under the depreciation and amortisation lines.

1.3. Compared to other categories of costs, they are also to a much greater extent within suppliers' control. Variation in these costs between suppliers is the greatest source of the inefficiency in the retail market that was identified by the CMA.

[1] These are financial statements that we require the six large suppliers to publish each year. The guidelines that the companies must follow when preparing these statements are published on our website at: https://www.ofgem.gov.uk/sites/default/files/docs/2015/05/css_guidelines_jan_2015.pdf

2. Estimating an efficient level of operating costs

In this chapter, we:

- describe the approach we propose to take to estimate suppliers' historical operating costs for the purposes of carrying out our benchmarking analysis.
- describe our initial analysis of suppliers' reported operating costs for the period 2015-2017.
- discuss the approach we propose to take to benchmarking these costs.
- discuss a number of drivers of variation in costs which may not be related to suppliers' relative efficiency or inefficiency.

The approach to assessing operating costs will differ depending on whether we adopt a reference price, or bottom-up cost approach.

Under a bottom-up approach, we would set the allowance for operating costs to be included within the baseline with reference to suppliers' costs in previous financial year(s) – and our view on what level an efficient level of these costs would be.

The discussion in the final section of this chapter is also relevant to questions around what (if any) operating cost adjustments we would make **under a reference price approach** to setting the cap.

Proposed approach to estimating suppliers' operating costs within a bottom-up cost assessment

2.1. Under a bottom-up approach (option 4, as described in our main overview document), we would set the allowance for operating costs to be included within the baseline with reference to suppliers' costs in the previous financial year(s). In this section, we describe the approach we propose for estimating suppliers' historic operating costs for the purposes of benchmarking.

Operating costs per customer vs operating costs per MWh

2.2. The number of customers a supplier serves will be a key driver of operating costs. For example, companies with more customers will tend to require more customer service staff, and to incur greater metering and bad debt costs. In contrast, generally we would not expect a supplier's operating costs to depend strongly on its customers' gas or electricity use. We note that a proportion of operating costs will also constitute overheads that do not vary with either customer numbers *or* supply volumes, at least in the short to medium-term.

2.3. We propose to carry out our analysis of operating costs on a cost per customer account basis, ie to estimate an allowance for operating costs in £ per customer. This is consistent with the approach taken by the CMA in its analysis of suppliers' indirect costs, and the approach taken in the supply price controls that existed in GB, prior to market liberalisation.

2.4. We will consider whether the operating cost allowance should be the same at the reference consumption level (ie the Typical Domestic Consumption Values, TDCV) and at nil consumption, or if the allowance at nil consumption should be lower. Our current view is that bad debt costs are the only element of operating costs which we might expect to depend on a customers' consumption to any material degree – although it is not clear if this is the case in practice.

2.5. This might be the case as customers that use more energy will have bigger bills, and so – all else equal - might be expected to build up bigger debt. In reaching our decision on whether to set a lower allowance for operating costs at nil consumption, we will consider evidence on the extent to which debt costs do in fact vary with consumption.

Total costs vs individual cost categories

2.6. We propose to carry out our analysis at the level of total operating costs per customer, rather than breaking this down into allowances for individual components of operating costs (eg metering, bad debt, customer service etc).

2.7. This is to take into account the possible substitutability between different categories of expenditure (eg expenditure on metering is potentially a substitute for expenditure on customer service). This approach will also reduce some of the challenges associated with ensuring that operating costs were allocated to individual categories on a consistent basis, across companies, providing more confidence that the data for each company is comparable. The difficulty of ensuring consistent allocation of costs between categories was a concern raised by a number of stakeholders.

Time-period

2.8. There are likely to be systematic changes in operating costs over time, for example, as a result of technological change and as companies make efficiency improvements. This would tend to lead us to focus on the most recent available data on costs for the purposes of calculating the default tariff cap – to reflect the most recent trends.

2.9. At the same time, there is a risk that the operating costs that a supplier incurs in any one reporting year may be atypical, due to exceptional events or as a result of where that particular supplier is in their investment cycle. Basing our operating cost

allowance on an average of reported costs over a number of years means that our results will be less sensitive to events in any one period.

2.10. In our information gathering to date, we have focused on data for the period financial year 2015 to financial year 2017.[2] Our initial analysis of suppliers' data is set out below. We continue to analyse the extent of trends in costs across the period – and what is driving them – in order to form a view on whether our benchmark should be set with reference to:

- operating costs in the most recent financial year, 2017;
- an average of operating costs in the period financial year 2016 to financial year 2017; or
- an average of operating costs in the period financial year 2015 to financial year 2017.

2.11. Our current view is that we would most likely set the benchmark with reference to operating costs in the most recent financial year. This would ensure that our benchmark reflects the most recent trends in suppliers' operating costs as a result of the smart meter rollout. However, in reaching our final decision, we will consider whether there is any evidence to suggest that costs in 2017 were atypical.

2.12. If we do use data spanning multiple periods, we will adjust so that these are in 2017 prices, using the annual CPIH movement as published by the Office for National Statistics (ONS) (see Chapter 3 for a discussion of the choice of inflation index).

Allocating costs to different groups

2.13. We propose to calculate separate allowances for gas and electricity. This will allow us to set separate caps for the two fuels (as described in our overview document). We note that it is relatively common for companies to allocate operating costs between fuels for their own business purposes, and the large suppliers also routinely allocate costs between fuels when preparing their audited CSS.

2.14. We do not intend to calculate a separate operating cost benchmark for customers with different types of electricity meters or in different regions.[3] The

[2] Different companies have different reporting years. In referring to "Financial year 20XX", we refer to the period Jan 20XX – Dec 20XX for a company with a reporting year ending in December (the majority of suppliers in our sample) - and the period Apr 20XX – Mar 20(XX+1) for companies with a reporting year ending in March.
[3] Although, to the extent that we do split out a variable component of these costs, this will affect the allowance for customers with multi-register meters, which will use more electricity on average.

specific operating costs associated with these groups is not routinely recorded or separated out by suppliers.

2.15. Similarly, we expect to base our estimate of the appropriate allowance for operating costs on data on suppliers' operating costs incurred across all customers on domestic tariffs. While in principle we would only include those costs specifically attributable to customers on default tariffs in our analysis, again information on operating costs is not routinely split out in this way by suppliers, nor is it clear on what basis this allocation could be robustly carried out. Such an approach would open the risk of the methodology being gamed, as suppliers choose advantageous cost allocation methodologies in reporting costs associated with different tariffs.

2.16. We will, however, consider whether there is any evidence to suggest that operating costs for customers on default tariffs are higher or lower than those on other tariff types – subsequent to any other adjustments that are made. We note that:

- whether a customer is on a default tariff may be correlated with a number of other cost drivers (for instance, whether they are served online etc), which we may take into account in our analysis

- the evidence collected by the CMA suggested that indirect costs would be much the same for customers subscribing to standard variable and non-standard tariffs[4]

- one area where costs may differ substantially for those on default tariffs is in relation to customer acquisition costs - we discuss the treatment of these costs below.

Which suppliers to include in our sample?

2.17. In principle, we could set our allowance for operating costs with reference to the historic costs of the more than 60 suppliers that are currently active in the domestic market. However, we consider that doing so would distort our estimate of what the efficient costs of a company at steady state would be. We currently intend to exclude from our sample:

- **Suppliers beneath 250,000 customers**. Small companies may have a significantly different cost base to suppliers that are at scale – particularly if they are growing rapidly. For this reason, we have only sought information

[4] See paragraph 9.349 of the CMA's Energy Market Investigation Final Report: https://assets.publishing.service.gov.uk/media/5773de34e5274a0da3000113/final-report-energy-market-investigation.pdf

for companies with over 250,000 customer accounts as of April 2017 (with dual fuel accounts counting twice) – a total of 15 suppliers. We consider that including smaller suppliers in our benchmarking would risk that the cap could be set at a level that would not reflect the per customer operating costs of a company at scale, in steady state. We nevertheless intend to use information on reported indirect costs per customer of a selection of smaller suppliers as a cross-check on our analysis.

- **Suppliers with niche business models**. Some suppliers have particular business models that may make it difficult to look at them on a like-for-like basis. This is particularly the case where companies target specific sub-populations of customers, for example: prepayment customers only, rental properties, or companies that offer a bundled "multi-utility" service. Where a supplier has a customer portfolio that covers a very specific sub-section of the market, this creates a risk that their cost base may not be comparable to the market at large. To meet the Bill's requirements, we cannot make different provision for different suppliers – we therefore need to set a cap level which is as widely applicable as possible.

- **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 financial data. At present we have not identified any companies which we intend to exclude from our sample due to data issues, although we will continue to consider our confidence in different suppliers' financial data as we refine our analysis.

- **Suppliers that are non-compliant**. 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 (e.g. to deliver a compliant level of customer service). A supplier in this situation might therefore have lower costs than other suppliers. Including this supplier in the sample 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 discuss in Appendix 3 how we might approach the question of identifying whether there are any suppliers that we should exclude due to non-compliance.

What to include in operating costs?

2.18. In defining operating costs for the purposes of our benchmarking, our proposed starting point is companies' reported "indirect costs", as defined within the guidance which the large suppliers are required to follow when preparing their consolidated segmental statements (CSS). This captures the majority of costs associated with core supplier functions of metering, billing, customer service and bad debt, as well as suppliers' overheads.

2.19. From these indirect costs, where possible we currently intend to exclude:

- Exceptional restructuring costs and fines paid for non-compliance, neither of which a supplier would be expected to be able to pass through to customers in a competitive market.

- The costs associated with administrating the ECO and FiT schemes, and industry initiative expenditure under the WHD. These costs should be captured under the specific allowances we propose to provide for those schemes under a bottom-up approach – see Appendix 7.[5]

- Transactions costs associated with purchasing wholesale energy. We propose to capture these costs within our allowance for wholesale energy.

2.20. We note that in principle we would also want to exclude any indirect costs associated with services other than sales of gas and electricity. We are continuing to analyse the extent of any such costs. Where it is not possible to remove these directly, we would take the likely scale of such costs into account when setting the level of the benchmark.

2.21. In addition to these exclusions, where possible, we propose to add the following cost lines (which are not categorised as indirect costs within the CSS) to operating costs for the purposes of our benchmarking analysis:

- Third party commissions, where these relate to sales and marketing (eg price comparison website or broker fees). These costs are categorised as 'other direct costs' in the CSS. The reason for including them within operating costs is that we consider these costs to be part of suppliers' wider sales and marketing costs – in our view internal and external sales costs should sit together. We discuss the question of the treatment of this entire category of costs – and whether it is appropriate to include an allowance for these costs in a cap that applies to customers in default tariffs - below.

- The administration costs of Elexon and Xoserve, as well as any other obligatory industry charges that are specific to supply, which have been otherwise categorised as 'other direct costs' (eg charges associated with the Supply Point Administration Agreement), and which are not covered in other components of the cap. For Elexon and Xoserve, we propose to add a standardised element to all suppliers' operating costs reflecting the average

[5] In relation to FiTs, some suppliers argued that they had incurred administration costs beyond those included under the levelisation scheme. However, we consider it appropriate that the allowance under a bottom-up approach to setting the cap be set with reference to the qualifying FIT costs as determined by BEIS, which is set to reflect the reasonable costs a licensee would incur as a result of the scheme.

reported cost per customer across all companies in the sample – we discuss our rationale for including these alongside operating costs in Appendix 4.

- Depreciation and amortisation charges. In the main, we expect these to relate to previous expenditure on IT systems or metering, and therefore it to be appropriate to include these alongside supplier operating costs more widely.

- Administration costs associated with the Warm Home Discount (WHD) scheme. These costs are not captured within the target expenditure used to set the allowance for WHD.

2.22. As discussed in Appendix 4, we intend to include the costs associated with the smart meter rollout within the allowance for operating costs. This is because these costs are intrinsically linked with the core supplier functions of metering, billing and providing customer service.

2.23. For the direct costs associated with the smart meter rollout (ie charges from the Data Communications Company (DCC), Smart Energy GB (SEGB), and the Smart Metering Installation Code of Practice (SMICoP) governing body) we propose to *exclude* these costs where these have been reported by suppliers within indirect costs, or capitalised and included in depreciation charges. We will then *add* to our estimate of operating costs for each year a standardised allowance across all suppliers to reflect these charges, in £ per customer. Our proposed approach to estimating this standardised allowance is set out in Appendix 10.

QA8.1 Do you agree with our proposed approach to estimating suppliers' operating costs (including our focus on total historical costs per customer, and estimating separate values for gas and electricity)?
QA8.2 Should a variable component of this allowance be split out to reflect differences in bad debt costs between customers with higher and lower consumption?
QA8.3 Do you consider 2017 to be an appropriate period on which to base our benchmark, or are there reasons to think a longer period would be more representative?
QA8.4 Do you consider that default tariff customers have higher or lower operating costs than other types of customers?
QA8.5 Do you agree with our proposal of where to exclude suppliers from our benchmarking analysis?
QA8.6 Do you agree with our proposal of what to include in our definition of operating costs?

Initial analysis of operating costs per account, 2015 - 2017

2.24. Building on the approach described above, we have carried out an initial analysis on suppliers' operating costs per customer account for the period 2015 – 2017. Table A8.1 summarises our estimates.

2.25. Our initial analysis shows that there has been very significant variation in operating cost per customer between companies across the period, for both gas and electricity. This is consistent with the findings of the CMA. Taking an average for each supplier over the period 2015-2017, the range between the highest and lowest cost supplier is over £50 per customer per year for gas, and over £40 per customer per year for electricity.

2.26. We have not, at this stage, excluded any suppliers from the sample (although we have not yet received data for all periods for all companies), nor have we made any adjustments to the data beyond those listed in the notes below the table. We will continue to review the information provided – including issuing a set of follow up questions to suppliers - and anticipate making both exclusions and adjustments prior to choosing any benchmark that were used to set the level of the cap under a bottom-up approach.

Table A8.1: Distribution of historical operating costs for gas and electricity

Operating costs for gas, £ per customer	Financial year				
	2015	2016	2017	2015 – 2017	2016 – 2017
Minimum	[60-70]	[70-80]	[80-90]	[80-90]	[80-90]
Lower quartile	[90-100]	[90-100]	[100-110]	[100-110]	[100-110]
Median	[100-110]	[100-110]	[100-110]	[100-110]	[100-110]
Mean	[100-110]	[110-120]	[110-120]	[110-120]	[110-120]
Upper quartile	[120-130]	[130-140]	[110-120]	[120-130]	[120-130]
Maximum	[150-160]	[180-190]	[140-150]	[140-150]	[150-160]
# of suppliers in sample	13	14	9 (suppliers with complete data and December year end only)		

Operating costs for electricity, £ per customer	Financial year				
	2015	2016	2017	2015 – 2017	2016 – 2017
Minimum	[60-70]	[70-80]	[70-80]	[80-90]	[80-90]
Lower quartile	[80-90]	[90-100]	[90-100]	[90-100]	[90-100]
Median	[90-100]	[100-110]	[100-110]	[100-110]	[100-110]
Mean	[100-110]	[100-110]	[100-110]	[100-110]	[100-110]
Upper quartile	[120-130]	[130-140]	[120-130]	[120-130]	[120-130]
Maximum	[140-150]	[160-170]	[130-140]	[130-140]	[140-150]
# of suppliers in sample	13	14	9 (suppliers with complete data and December year end only)		

Source: Ofgem analysis of cost information collected from suppliers.
Notes:

1. Point estimates have been replaced with £10 ranges.
2. For the purposes of this initial analysis, in addition to the core categories of indirect costs – metering, billing and bad debt, customer service, sales and marketing and overheads - operating costs include: 3rd party commissions, depreciation and amortisation, administration costs associated with the WHD scheme, and a standardised allowance for DCC, SEGB, Elexon and Xoserve charges. They exclude costs that we have – to date - been able to identify as relating to fines for non-compliance, exceptional restructuring costs, administration costs associated with ECO and FiT schemes, transaction costs associated with purchasing wholesale energy, and any costs associated with activities other than gas or electricity sales. In many cases we have not been able to separately identify these costs, and we expect to make further adjustments to increase comparability as our analysis continues.
3. Costs for financial year 2015 and 2016 have been inflated to 2017 prices using the annual value of the CPIH, taken from the ONS website.
4. To derive a cost per account, reported operating costs have been divided by a simple average of reported domestic gas and electricity customer accounts for each company at the end of March and end of September in each year.
5. The values for 2015-2017 and 2016-2017 are derived by taking a simple average for each company across the period (in real terms), and then comparing these
6. For the majority of suppliers, financial years end in December. A minority of companies have reporting years ending in March – for these companies "2015" would relate to the period April 2015 to March 2016, for example. Information has not yet been received for 2017 for companies with a reporting year ending in March 2018. Given this, we have excluded these companies when calculating the averages in the final two columns of the tables.

Proposed approach to benchmarking operating costs under a bottom-up cost assessment

An efficient level of operating costs

2.27. As shown by our initial analysis, there are large differences in operating costs between suppliers. Our view – drawing on the conclusions of the CMA – is that much of the variation in operating costs that we observe is likely to reflect differences in suppliers' efficiency.

2.28. We consider that the cap should be set to reflect an efficient level of costs. By this we mean that the level of the cap should not be affected by instances where suppliers have incurred higher costs in the past, and this was a result of factors within their control (ie a result of management decisions).

2.29. We consider that this approach is consistent with the Bill, which requires us to exercise our functions with a view to protecting existing and future customers on SVTs and default tariffs, and to have regard to the need to create incentives for suppliers to improve their efficiency.

2.30. Accordingly, if we knew the variation in historical costs was only due to companies' relative efficiency or inefficiency, we would set the baseline allowance for operating costs under a bottom-up approach at the level of the lowest cost supplier in our sample.

2.31. However, we recognise that there may be some variation in suppliers' operating costs that is driven by aspects of companies' operating environments that do not relate to the effectiveness or efficiency of the supplier (although the exclusions listed above will reduce this likelihood, and we will need to consider the materiality of any differences). We provide a list of possible factors that stakeholders have argued both drive variation in operating costs and are not related to relative efficiency or inefficiency in Table A8.2 below.

2.32. Were we to conclude suppliers have costs that are materially higher or lower, as a result of factors that are not related to efficiency – and we are able to reliably do so - we would seek to take this account in our benchmarking analysis. In principle, this could lead to a higher or lower allowance for operating costs and indeed the impact of different factors could to some extent, cancel each other out. In some cases, these factors could be correlated – and it may therefore be difficult to disentangle the individual effect of each factor.

2.33. This means that it will be important for us to take a decision about how to account for any of these factors in the round, looking at the overall effect on the ultimate level of the cap. In doing so, one factor we will have regard to is the extent to which we'd expect this variation in costs to be passed through in a competitive market.

Choosing our benchmark

2.34. Where we consider a factor has a material impact on costs, and is not related to efficiency, one option would be to make a specific adjustment within our analysis to correct for the expected impact. For example, this could involve reducing the reported costs of smaller suppliers to reflect the expected reduction in their operating costs were they operating at scale; or increasing the costs of non-incumbent suppliers to reflect the additional costs we would expect them to incur were they subject to the legacy pension obligations that affect the incumbent suppliers.

2.35. However, in many cases it will be challenging to precisely identify the impact of a given factor on a supplier's costs. This is particularly the case given that – as described above - different cost drivers will often be strongly correlated. We will only seek to make specific adjustments where we are able robustly to do so, without introducing greater risk of error into our analysis.

2.36. Where we consider that there is evidence of variation in operating costs that is not being driven by efficiency, and this is not captured in any specific adjustments that have been made, we will take this into account in choosing our overall benchmark. For example, if we were to reach the view that an average supplier would have materially higher costs than the lowest cost supplier for reasons that are outside of their control, then we might choose to use lower quartile costs instead of the sample minimum to set the level of the allowance, or to set the benchmark allowance a given percentage above the frontier. Alternatively, we could take an average across the historic costs of a number of lower cost suppliers with different operating conditions, to average out the impact of any company-specific cost drivers.

2.37. In deciding on our benchmark and ultimately setting a cap which meets the primary objective to protect customers, we must also have regard to how the level:

- affects the extent to which efficient companies with disproportionately high costs as a result of a factor outside of their control are able to finance their activities

- reduces the risk that lower cost suppliers recover costs above the efficient level, in addition to any headroom allowance included in the cap, and thereby undermine the degree of protection offered by the cap, and the incentive for lower-cost suppliers to improve their efficiency.

2.38. Given these trade-offs, as a general principle, we would seek to set the efficient benchmark, such that, an efficient supplier with 'average' characteristics could recover their costs.

2.39. Some stakeholders suggested that we should give greater weight to larger suppliers when benchmarking operating costs. We do intend to take company size into account in our analysis:

- We set out above our proposal to exclude suppliers with under 250,000 customers from our benchmarking analysis, due to risks around comparability.

- In the following section, we also discuss the possibility of making adjustments to reflect the higher overheads or customer acquisition costs of the smaller suppliers in the sample.

- We will also take into account in setting our benchmark any particular features of the incumbent suppliers' which could cause them to have higher costs for reasons other than inefficiency (for example, legacy pension costs, as discussed below).

2.40. However, in general we do not consider using a weighted average approach to be appropriate, as it would conceal variation in operating costs driven by differences in the efficiency of different suppliers' approaches to managing their businesses.

QA8.7 Do you agree with our proposed approach to benchmarking operating costs under a bottom-up cost assessment?

Cost drivers which may not be related to efficiency

2.41. Stakeholders have raised a number of possible factors that may drive variation in operating costs, but which are not related to relative efficiency or inefficiency. We have listed a range of possible cost drivers in costs in Table A8.2 below.[6]

2.42. Below, we discuss each of these factors in turn, describing the mechanism by which that factor could affect costs, and whether this is in principle something that we would propose to take into account in our analysis. We then discuss any initial evidence we have reviewed on the materiality of the impact on costs. We are continuing to review the information we have received through our requests for information from suppliers.

2.43. Under our 'reference price' approaches to setting the initial level of the cap (see Appendix 2 and Appendix 3), we intend to similarly consider whether to account

[6] In addition, one supplier argued that the proportion of a supplier's customers that lived in rental properties could drive variation in costs (eg in relation to bad debt), and this would be outside of their control. However, we considered that any such difference in the operating costs of serving those customers would to a large extent be driven by other features of the customer – such as their payment method, or vulnerability – rather than tenancy per se. We also consider that measuring the proportion of a suppliers' customers in rental properties would be very challenging, as this information will not be routinely observed by the supplier.

for drivers of variation in operating costs that may not be related to efficiency when choosing the benchmark to ensure that it is comparable with the market more broadly. This means that the subsequent discussion is also of relevance to the approach that we take to ensuring benchmark suppliers' prices are comparable under a reference price approach. We therefore do not duplicate the detailed discussion of these possible drivers in the reference price appendices.

Table A8.2: List of possible drivers of variation in operating costs

Features of the supplier

a) Company size	Growing suppliers may have higher overheads. Therefore, using smaller suppliers reported costs to set the benchmark may overstate the efficient level of costs for a company at scale.
b) Customer acquisition costs	Customer acquisition costs will be higher for suppliers that are growing – and there may be differences in how suppliers amortise these costs over time
c) Stage of smart meter rollout	Different suppliers' metering and customer service costs in 2015-2017 may be affected by the stage they are in their roll-out. This may or may not be linked to a supplier's efficiency.
d) Legacy pension obligations	The incumbent suppliers inherited legacy pension schemes at privatisation. Costs may be higher than for other pension schemes
e) Customer service level	It may cost a supplier more to offer a better level of customer service
f) Participation in industry code panels and work groups	Some suppliers may bear a greater share of costs of contributing to industry code workgroups. These costs are likely to be very small relative to other costs.

Features of the suppliers' customer base

g) Payment method breakdown	Customers paying via standard credit are likely to be more expensive to serve than those paying via direct debit. Therefore the proportion of a suppliers' customer base using different payment methods is likely to have a material impact on their operating costs.
h) Proportion of vulnerable customers	Customer with lower incomes or otherwise in vulnerable circumstances may be more costly to serve – and may not be equally distributed between suppliers.
i) Proportion of customers serviced online	Online customers may be cheaper to serve – eg lower costs of issuing bills and statements, cheaper to resolve customer queries online, greater automation opportunities.
j) Proportion of dual fuel and electricity-only customers	Dual fuel customers may be cheaper to serve, due to – for example – the economies of only having to send a single bill. Electricity only customers may be more expensive to serve due to the nature of their metering arrangements.

a) Company size

2.44. Larger companies will be able to spread their overhead and management costs over a wider customer base, reducing their average cost per customer. Economies of scale of this type could affect costs in a number of categories, including call centre, HR, IT and corporate recharges.

2.45. They may also enjoy greater bargaining power in their negotiations with third party companies, enabling them to achieve discounts, which again could reduce costs per customer. Larger companies may enjoy lower costs as a result of greater access to capital, and lower capital costs.

2.46. In setting its competitive benchmark, the CMA adjusted the reference price downwards to reflect its view that one of the benchmark companies had higher overhead costs than it would have had it been operating at an efficient scale. It also set out its view that the costs of the mid-tier suppliers were expected to fall as they expanded and so were able to realise economies of scale. These adjustments had a material impact on the level of the existing safeguard tariffs.

2.47. We will consider whether we should similarly take into account the expectation that smaller suppliers will have higher costs as a result of their smaller customer base in choosing our benchmark.

2.48. We have reviewed the cost forecasts of a number of medium and smaller suppliers, and noted that many of them expect significant reductions in costs as a result of anticipated growth. However, we recognise that forecast cost reductions may or may not materialise in practice. Making an adjustment in this area would involve a degree of judgement.

2.49. In reaching our decision on whether to make an adjustment to our benchmark to reflect that the costs of smaller companies in the sample may fall as they grow, we will consider the data that we have collected on realised costs. This will include considering both the relationship between a company's size and its historical overheads, and also whether individual suppliers' overheads have fallen as they have grown in the past.

b) Customer acquisition costs

2.50. A supplier will incur costs when it acquires a customer, such as any commissions paid to intermediaries. However, a supplier would generally expect to retain a customer for more than one year. If the supplier is benefitting from the customer acquisition over more than one year, then it does not make sense from an economic perspective to attribute the customer acquisition costs to a single year, even if this is the approach the supplier adopts from an accounting perspective.

2.51. To the extent that variation in how suppliers account for customer acquisition costs has a material impact on reported operating costs, this is something that we would want to reflect in our analysis. In particular, if some suppliers had treated these as a cost in the year they were incurred, and other suppliers had capitalised these costs in order to amortise them over several years, there would be a risk that this could drive significant variation in costs that are not related to efficiency. This is a particular concern where suppliers are growing, and where their customer acquisition costs are therefore likely to be a higher proportion of their operating costs (than for suppliers with flat or declining customer numbers).

2.52. We note that in choosing the competitive benchmark used to set the level of the existing safeguard tariffs, the CMA took steps to ensure that the customer acquisition costs of the benchmark companies were amortised over a consistent period.[7] This adjustment had a material impact on the level of the existing safeguard tariffs.

2.53. Putting to one side the issue of the accounting basis on which these costs have been reported, because suppliers that are growing would be expected to have higher customer acquisition costs, this may overstate the level of these costs that would be expected if that supplier were operating at a larger scale, in steady state.

2.54. This is similar in principle to the discussion around overheads above, and could lead to suppliers that are growing having higher costs for reasons that are unrelated to efficiency. In reaching our view on whether an adjustment should be made, we will consider data on the relationship between suppliers' growth rates and their reported customer acquisition costs.

2.55. Finally, we note that there is a wider question about whether customer acquisition costs should be reflected in the benchmark at all. In particular, this is because customer acquisition costs primarily relate to the costs associated with attracting new customers, rather than relating to expenditure associated with those customers already on default tariffs.

2.56. We note that to the extent that these costs are amortised over the expected length of time that customers spend with their supplier, then some part of these costs may be attributable to customers on default tariffs, in that it will relate to previous expenditure acquiring those customers prior to their moving onto a default tariff. However, for customers who have spent many years on a default tariff, a supplier will not have incurred any customer acquisition costs recently, and so there

[7] See paragraphs 29 to 32 of Appendix 10.1 of the CMA's Final Report (2016): https://assets.publishing.service.gov.uk/media/576bcc60ed915d3cfd0000bd/appendix-10-1-domestic-retail-detriment-direct-approach-fr.pdf

is a question about whether the level of the cap should be set with reference to costs which are not relevant to these customers.

2.57. We are seeking views on whether it is appropriate to include these costs when assessing the relevant benchmark.

c) Payment method breakdown

2.58. Since market liberalisation, suppliers have charged different customers different amounts depending on the payment method they use to pay for their energy. Condition 27.2A of the supply licence requires that any such price differentials are cost reflective.

2.59. Suppliers are required to offer a range of payment methods under the licence,[8] and a customer's choice of payment method will therefore be within that customer's control, rather than the control of the supplier. Suppliers may however be able to influence customers' choice of payment methods via, eg their pricing and marketing strategies.

2.60. Because customers paying via standard credit or prepayment are likely to be more expensive to serve than those paying via direct debit, the proportion of a suppliers' customer base using different payment methods is likely to have a material impact on their operating costs.

2.61. We discuss our approach to different payment methods in detail in Appendix 12.

d) Stage of smart meter rollout

2.62. The smart meter roll-out is ongoing. Suppliers are required to take all reasonable steps to ensure that a smart meter is installed by 31 December 2020. However, they have some discretion about the timing of their roll-out before this. This means that suppliers' metering and customer service costs in 2015-2017 may be affected by the stage they are in their roll-out. This may or may not be linked to a supplier's efficiency.

[8] As set out in SLC 27.2(b) of the supply licence, this requirement only applies to suppliers with more than 50,000 Domestic Customers.

2.63. We consider it appropriate to consider costs associated with the roll-out alongside operating costs more broadly, given how intrinsically they are linked with the core supplier functions of metering, billing and providing customer service.

2.64. We discuss our approach to estimating the impact of the smart meter rollout on suppliers' costs in Appendix 10. Where we find evidence that variation in suppliers' historical operating costs is being driven by differences in the stage of the smart rollout that they are at, we would seek to take this into account in how we choose our benchmark.

e) Legacy pension costs

2.65. Some stakeholders have argued that the large suppliers are incurring higher costs as a result of the legacy pension schemes that they inherited at privatisation. The costs of these pensions (which may often be final salary schemes) are likely to be high compared to other types of pensions, such as defined contribution schemes. This could affect the corporate recharges reported by a company.

2.66. Because these obligations were inherited on privatisation, the suppliers would have no control over any additional costs associated with these schemes. In principle, we recognise that a supplier subject to these legacy pension costs could have higher operating costs without this being an indication of current inefficiency.

2.67. At this stage, we are still in the process of considering whether or not the incremental costs that individual suppliers incur associated with these pension schemes are material. One supplier has provided us with figures for its ongoing accrual and deficit repair costs in relation to the Electricity Supply Pension Scheme. We have collected further information from suppliers as part of our information gathering, which we are in the process of analysing.

2.68. There are a number of complexities which may limit our ability to accurately estimate the incremental impact of legacy pension costs on the large suppliers' operating costs. These challenges may mean that making a specific adjustment would risk making the cap less, rather than more, accurate. Potential issues in developing an accurate methodology are:

- Within company groups, it may be hard to identify the costs which relate to the domestic supply business. While it may be possible to isolate pension accrual costs for employees in a supply business (e.g. from a generation business), it may be difficult to separate out deficit repair costs in a similar fashion.

- Isolating these costs that are attributable to the domestic (as opposed to non-domestic) supply business could add additional complexity.

- We would need to identify a suitable counterfactual for legacy pension costs. If current employees were not part of a legacy pension scheme, they would still part of other pension arrangements, which would lead to the supplier incurring some costs.

2.69. For the reasons above, where we consider these cost differences to be material, we propose not make a specific adjustment but will consider this in the round when the overall benchmark level is set.

f) Proportion of vulnerable customers

2.70. In responses to our first working paper, some suppliers told us that customers in vulnerable situations are typically costlier to serve than other customer groups. One of the explanations raised was that customers on lower incomes are more likely to struggle to pay their bills in full and on time, increasing a supplier's bad debt costs. It was also highlighted that vulnerable customers may also be more likely to be on the Priority Services Register (PSR) (which may in turn lead to higher customer service costs, for example).

2.71. Energy is an essential service, and we see protection of customers in vulnerable situations as a priority. Providing additional support to these customers is not a discretionary activity for suppliers. Given this, suppliers with a high proportion of vulnerable customers may face some higher costs that are not due to inefficiency. To the extent that vulnerable customers are less likely to engage, this may particularly affect suppliers with a greater number of default tariff customers.

2.72. In order to assess the scale of any effect on costs, we will consider data on the number of customers in debt, and the number of customers in arrears – as well as the number of customers on the PSR. We will assess both the overall proportion of customers, and the extent to which this varies across suppliers.

2.73. We will also consider any evidence on the additional cost to serve associated with a customer on the PSR. We note that there are likely to be significant overlaps with other factors that may drive variation in costs (eg vulnerable customers may be more likely to pay via standard credit) – and there is a question as to whether there will be material differences in cost once these have been taken into account.

2.74. We note that it may be difficult to estimate the incremental costs of supplying an above average number of vulnerable customers. As is the case more generally, if we were to make a specific adjustment in setting our benchmark, we would need to be confident that it would improve, rather than reduce, the accuracy of our benchmark.

g) Customer service level

2.75. Subject to meeting their regulatory requirements, suppliers have significant discretion over the customer service that they offer. In some cases, offering additional services could result in additional costs (for example, offering longer call centre hours would mean increased staffing costs).

2.76. Under the Bill, we cannot make different tariff cap conditions for different suppliers, and we therefore cannot set different caps for different suppliers to reflect variation in customer service levels. Provided that a supplier is meeting its obligations under its licence, we do not currently propose to take any further account of variation in suppliers' level of customer service in setting our benchmark. This is because:

- Where consumers are on default tariffs, it is hard to know whether or not they value features of their current tariffs (because they have not made an active choice). We would therefore be wary about requiring these customers to pay more for features which they may or may not want.

- Even if we set a higher level of the cap to reflect a higher level of customer service, there would be no guarantee that suppliers would actually provide a higher level of service, unless we introduced new regulatory requirements.

2.77. In practice, this could mean that a supplier who is efficient, but who offers a higher level of service, may have costs above the benchmark. However, we have not seen any evidence to suggest that better customer service is in fact related to higher costs.[9] In some cases, the opposite could be the case: eg higher operating costs may be related to problems with billing systems, which may result in worse service levels.

2.78. We also note that suppliers offering a higher level of customer service would still be able to recover any associated higher costs from fixed tariff customers – consumers would then make an active choice to select these tariffs, even if they are more expensive than the cap.

2.79. We will also continue to monitor whether suppliers are meeting their obligations under the licence, including the general requirement to treat customers fairly. Ensuring suppliers offer a level of quality befitting an essential service is a priority for Ofgem. We will observe suppliers closely once the cap is introduced to ensure that service levels to do not fall to unacceptable levels. We will use our full

[9] For example, the CMA said that it "did not find any evidence to suggest that one or more of the Six Large Energy Firms was providing a materially higher quality service than the others, which would have justified the level of costs differences that we have observed". See paragraph 52 of Appendix 9.11 of the CMA's Final Report (2016): https://assets.publishing.service.gov.uk/media/577bb5b6ed915d622c0000dd/fr-appendix-9-11-assessment-of-indirect-costs.pdf

range of regulatory powers to manage the risk of suppliers' reducing quality as a result of the cap.

h) Proportion of customers served online

2.80. There are a number of reasons why customers who manage their accounts online may be less expensive to serve. For example, we would expect lower costs in relation to issuing bills and statements, and there may also be lower costs associated with dealing with customer service queries online. A number of suppliers either offer, or have in the past offered, discounts to customers that are willing to administer their accounts online.

2.81. A customer can choose whether or not to manage their account online. We expect suppliers to have significant influence over the proportion of its customer base which is served online – for example by providing discounts or cheaper online-only tariffs. We note that in a number of cases, increased digitalisation forms a significant part of suppliers' cost efficiency programmes.

2.82. However, there is likely to be a set of consumers who are unable to manage their account online, or despite suppliers' efforts, will always prefer to manage their account in another way. We expect that these customers are more likely to be disengaged, and so more likely to have remained with their legacy supplier. This may result in the large suppliers having higher costs, for reasons that are not a result of inefficiency.

2.83. There are significant practical challenges with estimating the impact that this will have on suppliers' operating costs:

- It is unclear how we could estimate the proportion of customers that would be unable to manage their account online – or would never choose to do so – and so the additional cost which is truly outside of the large companies' control.

- Whether a customer administers their account online is likely to be particularly strongly correlated with payment method and vulnerability.

2.84. We have collected data from suppliers about their view of the costs differential between online and offline account management. We have also considered information on paperless discounts, and on the differences between tariffs which require online account management and tariffs which do not. While our analysis is ongoing, our work to date suggests that it will not be straightforward to develop a robust estimate of the incremental cost of supplying an offline customer.

2.85. For the reasons above, where we consider these cost differences to be material, we propose not to make a specific adjustment but will consider this in the round when the overall benchmark level is set.

i) Participation in industry code panels and workgroups

2.86. Suppliers must adhere to the industry codes as dictated by their licences. However, it has been argued that large suppliers may incur higher costs as a result of their greater representation on industry code panels/committees and workgroup meetings. To some extent, this could be seen as providing a social benefit to the industry, through the provision of expertise (although large suppliers may not be the only parties with such expertise). If a supplier is incurring higher costs because it is contributing more time to the code governance process, this would not be due to inefficiency.

2.87. However, any such activity is voluntary, and may partly reflect an expectation by suppliers that they may get some specific benefits from participating. For example, a supplier attending a workgroup meeting may hope to influence the change process.

2.88. We also note that even if we set the level of the cap to reflect an assumed level of participation in industry code governance, this would not ensure that suppliers would continue to do this.

2.89. In principle, we are therefore not minded to make an adjustment for participation in industry code panels and workgroups when setting our benchmark. While we will continue to consider information that we have collected on variation in the costs suppliers report in relation to their participation in industry code governance, we have not seen evidence to date to indicate that these costs are likely to be material.

2.90. We also note that, even if we did consider that this is something we should take into account in our benchmarking analysis, it would be difficult in practice to make a specific adjustment to reflect the impact different levels of participation have on costs. First, it would be challenging to identify where participation by suppliers is providing social benefits. Second, it would be hard to identify the incremental cost of participating in governance processes, especially where this is likely to be only part of the roles of the relevant employees at each supplier. Third, some modifications will cut across both wholesale and retail markets, or across both domestic and non-domestic supply – it would be hard to accurately distinguish any costs specific to domestic retail.

j) Proportion of dual fuel and electricity only accounts

2.91. Nearly all suppliers offer both gas and electricity. It may be cheaper to serve a single dual fuel customer than two distinct customers with separate gas and electricity accounts. For example, this may result in lower costs in terms of issuing bills and statements, and payment services (although the cost differences may be less pronounced where a consumer is served online, given that the costs of issuing bills and statements will be much lower in any case). Historically, a number of

companies have offered discounts to those paying via dual fuel, although this is now much less common.

2.92. Some consumers only have an electricity supply. A supplier can potentially influence whether they acquire these customers through their marketing and pricing strategy, but they are not able to influence their existing stock of electricity-only customers. If a supplier has lower costs because it has focussed on dual fuel customers, this may result in it having lower costs than an incumbent supplier, which would have inherited a proportion of electricity-only customers at privatisation.

2.93. Because electricity-only customers are more likely to have legacy metering arrangements, a similar effect could be seen if there are additional operating costs associated with supplying customers with these meter types. We have not, however, received any evidence to suggest that there are additional operating costs specifically associated with these meter types – and note that restricted metering arrangements other than Economy 7 account for a small share of all electricity customers.

2.94. Some consumers may also have single fuel gas and electricity accounts (ie gas and electricity accounts with different suppliers) because they have not switched energy provider since privatisation. In this case, they would be more likely to be with the incumbent suppliers.

2.95. In principle, we may want to consider taking into account the proportion of customers on dual and single fuel accounts of those suppliers in our sample when setting our benchmark. However, before making an adjustment, we would need to find evidence that there was a material cost difference.

QA8.8 Which if any of the factors listed in Table A8.2 do you think we should take into account when choosing our benchmark? Do you have any suggestions for how we could estimate the materiality of the impact of any of these factors on cost?

3. Updating the cap to reflect trends in operating costs

In this chapter, we consider how the part of the cap relating to suppliers' operating costs should be updated over time. We would propose to use the same methodology, irrespective of the approach we use to set the initial level of the cap. We begin by describing our proposed approach. We then discuss three key issues relating to this approach: the treatment of inflation, the treatment of costs relating to the smart meter rollout and the inclusion of an efficiency factor.

Proposed approach

3.1 In Appendix 5 we describe our high level proposal to update the level of the default tariff cap using indices that are outside of suppliers' control. The level of the cap would be updated twice a year, with new levels coming into force each April and October – and the updated values published no later than the fifth working day in February and August respectively.

3.2 We propose to update the operating costs component of the default tariff cap using the following approach:

- Indexing the baseline operating costs allowance using the most recent value of CPIH (ie the consumer price index, including owner occupiers' housing costs), as observed prior to the level of the cap being set.

- Amending to reflect an additional component in £ per customer, with different values for 2018/19, 2019/20 and 2020/21, to reflect the additional trend in the net costs that suppliers as a whole are expected to incur as a result of the smart meter rollout.

3.3 We would use this approach irrespective of whether we set the initial level of the cap using a bottom-up assessment of costs, or based on a reference price approach.

3.4 We are minded-to not include an efficiency factor to reduce the level of the cap to reflect an overall expectation that the most efficient suppliers should be getting more efficient over time – although our final decision will depend on the ultimate approach we take to benchmarking in the initial level of the cap. This is distinct from the efficiency improvements expected for individual companies above the efficiency benchmark as they seek to catch up to the efficient frontier.

Key issues

Inflation

3.5 Over time, we expect there to be inflation in suppliers' operating costs (including staff costs, IT and meter rental), which may have a significant impact on the costs of supplying energy. Because general price inflation in the economy will be outside companies' control, we consider that the allowance for operating costs in the default tariff cap should be uprated over time to reflect trends in inflation.

3.6 This is consistent with what we would expect in competitive markets, where inflationary cost pressure would be passed on to customers.

3.7 The main inflation measures in the UK – and so options for indexing the default tariff cap - are: RPI (Retail Price Index), CPI (Consumer Price Index) and CPIH (CPI including owner occupiers' housing costs). The key differences between the measures relate to the contents of the baskets of goods and services, and the associated expenditure weights.

3.8 RPI is a long-standing measure of inflation – and is the measure that has historically been used to index the gas and electricity network price controls. However, it is no longer a national statistic as ONS has discouraged its use since 2013.

3.9 Both CPI and CPIH are produced to international standards and in line with European regulations. CPI is used to index the existing safeguard tariffs. However, since 2017 CPIH has been the ONS' lead inflation index, as it provides a more comprehensive picture of price changes. Given this we are currently minded to use it to index the allowance for operating costs in the default tariff cap.

3.10 Specifically, we would propose that for a price cap period starting on 1 October, the level of the cap would be updated using CPIH for the month of June preceding the start of this price cap period. For a price cap period starting on 1 April, the level of the cap would be updated using the CPIH for the month of December preceding the start of this price cap period. These timings are consistent with those used in the existing safeguard tariffs.

3.11 In addition, were we to set the baseline allowance for operating costs using data on costs from more than one financial year, we would uprate information for earlier financial years to 2017 prices using the CPIH. Specifically, we would do so using annual values of the CPIH. That is, reported costs for 2015 will be uprated to 2017 prices using the annual CPIH rate in 2015 and 2016.

QA8.9 Do you agree with our proposal to use CPIH to index the allowance for operating costs within the default tariff cap?

Treatment of the costs of the smart meter rollout

3.12 The ongoing rollout of smart meters is a key priority for the industry. Suppliers are required to take all reasonable steps to ensure that a smart meter is installed by 31 December 2020. The installation of the new meters, and the consequences for the way that meters are read and customers are billed, is expected to affect many different elements of suppliers' operating costs, both up and downwards.

3.13 In Appendix 10 we discuss the impact that the smart rollout is expected to have on suppliers' operating costs, and the options we have considered for how this could be reflected in the way that the operating costs component of the default tariff cap is updated over time. In that appendix, we set out our current proposal that an additional component in £ per customer is applied to the cap to reflect the change in net costs that is expected in 2018 to 2020 as a result of the smart rollout – the 'Smart Metering Net Cost Change' (SMNCC).

3.14 DCC, SEGB and SMICoP charges will be considered outside of suppliers' control, and this part of the SMNCC will be set with reference to published charging statements. The remainder of the index will be set in advance, based on our view of the expected impact of the rollout on the operating costs of an efficient supplier.

Efficiency factor

3.15 It is common for price controls to include an adjustment to reflect expected improvements in the efficiency frontier over the period of the price control (sometimes referred to as 'frontier shift'). This is distinct from any efficiency improvements expected for individual companies as they catch up to the frontier. It reflects the general expectation that even efficient companies will become more productive over time, for instance, as a result of technological change.

3.16 Were we to include an efficiency factor in the cap, it could be set, for example, with reference to historical information on trends in real costs among the most efficient suppliers in the market (after controlling for any trends relating to the smart meter rollout); or the forecast cost savings of the benchmark companies.

3.17 We are currently minded-to not include an efficiency factor when updating the level of the default tariff cap. This is consistent with the approach taken in the existing safeguard tariffs. We note that anticipated cost savings resulting from the smart meter rollout would be captured in the specific adjustment for trends in these costs.

3.18 One reason for this is that the initial duration of the price cap period is relatively short. We expect the scope for efficiency gains at the frontier over that period to be much more limited than the (likely large) scope for gains as companies catch up to that frontier.

3.19 However, our final decision will depend on the ultimate approach we take to benchmarking operating costs within the initial level of the cap, as well as our decision on headroom.

QA8.10 Should the default tariff cap be reduced over time to reflect an expectation of general productivity improvements – and if so – at what level should this efficiency factor be set?

4. 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 in the main consultation document.

Unless you mark your response confidential, we will 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 – Estimating an efficient level of operating costs

Question A8.1: Do you agree with our proposed approach to estimating suppliers' operating costs (including our focus on total historical costs per customer, and estimating separate values for gas and electricity)?
Question A8.2: Should a variable component of this allowance be split out to reflect differences in bad debt costs between customers with higher and lower consumption?
Question A8.3: Do you consider 2017 to be an appropriate period on which to base our benchmark, or are there reasons to think a longer period would be more representative?
Question A8.4: Do you consider that default tariff customers have higher or lower operating costs than other types of customers?
Question A8.5: Do you agree with our proposal of where to exclude suppliers from our benchmarking analysis?
Question A8.6: Do you agree with our proposal of what to include in our definition of operating costs?
Question A8.7: Do you agree with our proposed approach to benchmarking operating costs under a bottom-up cost assessment?
Question A8.8: Which if any of the factors listed in Table A8.2 do you think we should take into account when choosing our benchmark? Do you have any suggestions for how we could estimate the materiality of the impact of any of these factors on costs?

Chapter 3 – Updating the cap to reflect trends in operating costs

Question A8.9: Do you agree with our proposal to use CPIH to index the allowance for operating costs within the default tariff cap?
Question A8.10: Should the default tariff cap be reduced over time to reflect an expectation of general productivity improvements – and if so – at what level should this efficiency factor be set?