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Consultation

Statutory Consultation – Default tariff cap – Overview document

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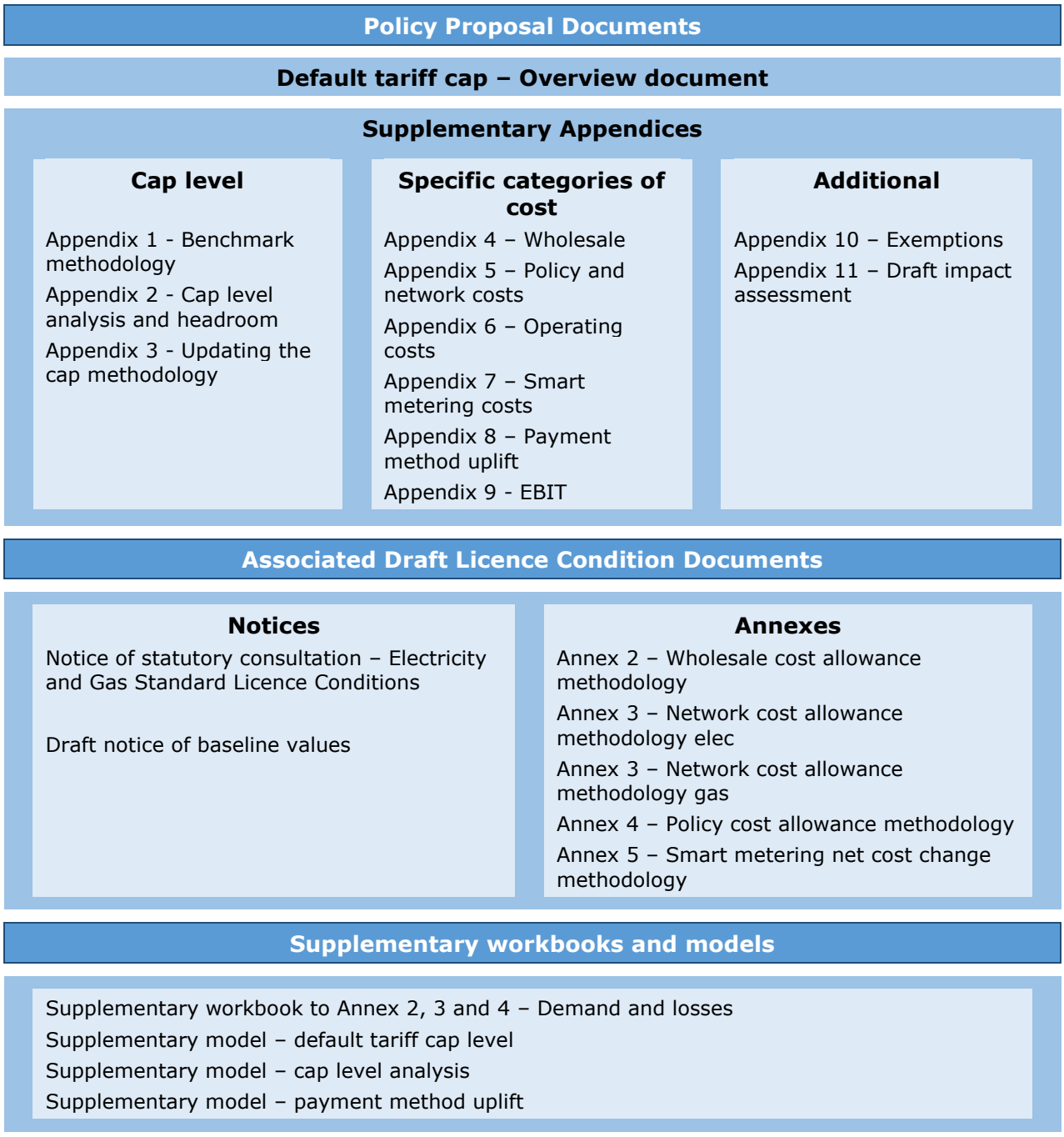
We are consulting on our proposals for setting and updating a default tariff cap as required by the Domestic Gas and Electricity (Tariff Cap) Act which came into force in July 2018. This includes how we propose to set the initial level of the cap, and how we propose to update it over time to reflect underlying cost changes. We would like views from people with an interest in how the cap will affect consumers, suppliers, and the market as a whole. We particularly welcome responses from suppliers and consumer groups. We would also welcome responses from other stakeholders and the public.

This document outlines the scope, purpose and questions of the consultation and how you can get involved. Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at **Ofgem.gov.uk/consultations**. If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

Document map

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

Figure 1: Default tariff cap – statutory consultation document map



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Foreword

The current energy market does not work well enough for all consumers. Competition has driven down prices for those who switch and increased the overall levels of customer service in the sector, although further improvement is needed. But these benefits have not been felt by everyone. Those who have not engaged in the market and switched their tariff or supplier are being charged more than they should.

Following Parliament's approval of new legislation, Ofgem is meeting its duty to introduce a maximum price that suppliers can charge their default tariff customers as quickly as possible. This default tariff price cap, which is the subject of this document, is a significant intervention which will protect the 11 million households on default deals from being overcharged and rein in the excess profits made by suppliers from these customers. Our proposals will require energy suppliers to step up their game. If suppliers want to compete in the energy market of the future, then they need to become more efficient, as well as improving the quality of service they give to their customers.

The default tariff cap is part of Ofgem's strategy to improve customers' experience of the energy market. The energy system is on the cusp of a revolution thanks to the rapid expansion of new technologies, especially distributed generation like solar, smart metering and electric vehicles. This cap will provide protection to disengaged consumers while we reform the retail market, including by ending the privileged position that today's suppliers enjoy as the sole interface between consumers and the energy system. Working with government, our reforms, including the introduction of faster, reliable switching and electricity settlement reform will help unlock innovation and encourage more customers to engage with their energy supply in new and exciting ways. They will support the transition to a lower carbon, more flexible and lower cost energy system. Ofgem will continue to work to create a retail market that works for all energy consumers, both today and tomorrow. Our proposals for a default tariff cap are at the heart of our strategy to achieve this.

Dermot Nolan
Chief Executive

Executive summary

The Act: protecting customers on default tariffs

Energy suppliers charge their Standard Variable Tariff (SVT) customers considerably more than customers who choose cheaper fixed tariffs (FTs). In its investigation, the CMA concluded that suppliers had market power over SVT customers, because these customers tend to be less engaged in the market, switching to new energy contracts less frequently.

The Domestic Gas and Electricity (Tariff Cap) Act (the Act) came into force on 19 July 2018. It requires Ofgem[1] to, as soon as practicable, design and implement a cap (the default tariff cap) with the objective of protecting existing and future customers who pay standard variable and default rates.

In setting the cap with a view to protecting SVT customers[2], the Act requires us to have regard to the following matters:

(a) the need to create incentives for suppliers to improve their efficiency
(b) the need to set the cap at a level that enables suppliers to compete effectively for domestic supply contracts
(c) the need to maintain incentives for domestic customers to switch to different supply contracts and
(d) the need to ensure suppliers who operate efficiently are able to finance their licenced activities.

What impact would the proposed cap have?

This document explains our policy proposals for setting and updating the default tariff cap. These proposals mean that the cap, when it comes into force as soon as practicable, should cap prices at around £1,136 for dual fuel customers paying by direct debit, and £1,219 for those paying by standard credit.[3]

We are proposing to set the cap at this level because it would provide a high level of protection – ensuring SVTs reflect more closely their underlying costs of supplying energy, protecting customers from overpaying for their energy and from unjustified price rises.

Based on our analysis, 96% of SVT customers in 2017 would have paid less under our proposed default tariff cap, reducing their bills by £1.3 billion. We estimate this will equate to customer savings of about £1 billion when the cap is introduced. This figure is lower because there are now fewer customers on default tariffs than in 2017 and because suppliers' prices have not risen as quickly as wholesale prices have during this period. In practice, that means customers might save less in 2019 than they would have done in 2017, because they are currently overcharged to a lesser extent. Regardless of suppliers' short-term pricing decisions, the cap will protect SVT customers from being overcharged.

Having had regard to the needs identified in section 1(6) of the Act, we consider the proposed cap level most appropriately meets the objective of the Act to protect SVT customers.

The proposed cap will create strong incentives to reduce inefficiency. The CMA, in their investigation, concluded that large suppliers were inefficient, with higher costs than to be

[1] The Gas and Electricity Markets Authority.
[2] In this consultation we refer to "existing and future customers who pay standard variable and default rates", as specified in the Act, as "SVT customers" for brevity.
[3] These cap levels are stated in annualised terms for a customer with typical consumption paying a single rate tariff. The cap levels stated include network costs at the national average rate. The cap will adjust for differences in network charges across 14 regions of the country.

expected if competition was more effective.[4] We propose to set the cap with reference to the third lowest operating cost per customer amongst ten representative large and medium suppliers that we analysed, with an additional (£5 per dual fuel account) efficiency factor to sharpen their incentives to reduce their average costs.

The proposed cap maintains incentives for domestic customers to switch contracts. We expect small- and medium-sized suppliers to continue offering cheaper FT contracts, incentivising customers to switch. These suppliers can offer cheaper tariffs because they have costs below the default tariff cap level that we propose. Suppliers with high operating costs per customer are less likely to offer low tariffs, and some or all may increase their FT prices. While the cap is in place, we think it likely that switching rates will be lower than today's levels (absent other changes). However, we would expect switching to grow again once the cap is removed, as transformation in the market introduces conditions for effective competition.

The proposed cap enables a range of suppliers to compete. Notwithstanding the fact that certain – relatively inefficient – suppliers may face more challenges once SVT prices reduce, our analysis suggests that a range of different types of supplier will be able to compete for customers effectively. We do not consider it would be consistent with the Act's objective if we were to set a higher cap level for the purpose of enabling every supplier – even those who may be relatively inefficient – to compete.

As we propose to set the cap level based on our assessment of efficient costs and a 'normal' profit level (1.9%), we consider that an efficient supplier would be able to finance its activities on that basis. We have based our normal profit allowance on the CMA's analysis undertaken for their recent energy market investigation.

We recognise that some suppliers have higher efficient costs than others – due to the different needs and circumstances of their customers – and that costs can be uncertain and volatile. We take this into account in our proposal to set the cap higher than the level of the lowest cost suppliers and we include an additional allowance for uncertainty, thereby ensuring a typical efficient supplier would be financeable.

How do we propose to set the cap?

We propose to set the cap using a "bottom up" cost assessment. For each component of a customer's bill we propose to provide an allowance for efficient costs. In total, these allowances ensure that customers' bills reflect the underlying efficient cost of supplying them energy. We have undertaken a broad range of analysis to help us to reach the proposal we set out in this consultation.

We face several challenges when estimating an efficient cost level, which is not something that can be directly observed. Due to their inefficiency, many suppliers' actual costs are higher than an efficient level. An efficient level of costs will also differ between suppliers, due to differences in their customer bases and operating environment. Setting an efficient benchmark needs to be based on an examination, looking across the whole market and not picking one specific operator as being perfectly representative of an "efficient benchmark".

In addition, suppliers' costs can be difficult to anticipate and data we rely on will unavoidably introduce uncertainty. Solely relying on suppliers' data risks overstating allowances, as suppliers have an inherent advantage when they present and explain their costs.

We propose to set allowances for wholesale, network, and policy costs with reference to external data, which suppliers do not control. This provides us with robust forecasts of the costs suppliers should efficiently incur and pass on to customers in a particular cap period.

We propose an allowance for suppliers' operating costs per customer based on analysis of ten large and medium suppliers in 2017. We propose to set this allowance with reference to the

[4] Competition and Markets Authority, *Energy market investigation.* https://www.gov.uk/cma-cases/energy-market-investigation#final-report

lower quartile supplier (one of the largest six suppliers) and deduct an additional efficiency factor to sharpen incentives for suppliers to reduce inefficiency. We make provision for an efficient supplier to make a normal rate of return before interest and tax (1.9%).

We propose to set the operating costs allowance 15% higher than it would be if we based it on the lowest cost suppliers in our sample (the frontier). These frontier suppliers have customers that are likely to be cheaper to serve than the market as a whole, so we would not expect suppliers with a typical customer base to match their costs.

In addition to allowances for variation in efficient operating costs and uncertainty in various elements of the efficient benchmark, we also propose to include a "headroom" allowance to help suppliers' manage additional costs of uncertainty – equivalent to £12 per dual fuel customer when we introduce the cap.

We do not consider it would be in accordance with the Act for there to be headroom to enable suppliers with higher operating costs to subsidise cheap fixed tariffs and continue competing by charging SVT customers more. In any case, we expect that lower cost suppliers will provide sufficient incentives for customers to switch energy contracts.

We propose to set a higher cap for SVT customers paying by standard credit, similar to current market practice. This allows suppliers to recover an efficient level of the additional bad debt, working capital, and administrative costs associated with standard credit. Under our proposed approach, we anticipate that the standard credit cap in Jaunary 2019 will be £83 higher than the direct debit cap – slightly lower than the current market differential.

How do we propose to update the cap?

We propose to update the level of the default tariff cap over time. This will ensure the cap reflects the increases and decreases in suppliers' costs that are outside of their control – for example, as a result of movements in wholesale prices, network charges, and the costs associated with funding government policies.

We propose to update the cap every six months in April and October, and announce the updated cap level two months before each cap comes into force. The first cap period will be shorter, to align it to when we set the prepayment meter cap. We propose to update the cap by applying changes in external cost data and indices and applying these to the 2017 baseline. These updates include changes in the net costs of introducing smart meters. Given the uncertainty around the cost and pace of rolling out smart meters, we intend to review these costs in time for the third cap period, which will start in October 2019.

We need to be sure that the cap tracks changes in underlying costs reasonably accurately. We will use our licence modification powers to adjust the cap if we were to find systematic error leading to the cap being too high, or low. We have assessed the risk of forecast error and allowed for this in the efficient benchmark. We do not propose including a mechanism in the cap for correcting previous forecast errors – whether they benefit suppliers, or not. We are concerned that such an adjustment mechanism would distort the market. A six monthly review of the level of the cap should be sufficient to allow cost trends to feed through to the level of the cap, and avoid undue risk for suppliers.

When will the cap be removed?

The cap is temporary. The Act requires that it be removed in 2020, unless Government decides to extend the cap for a further 12 months. Government can only extend the cap three times. The cap must end by 2023. From 2020, we will assess whether conditions for effective competition are sufficient for Government to remove the cap.

In May, we consulted on how we might assess the conditions for competition. We propose to develop a framework that sets out how we will evaluate the prospect of effective competition in the market after the default tariff cap is removed. This framework will form the basis of our

recommendation to the Secretary of State, based on a broad set of market indicators that allows for a wide, evidence-based, and transparent view of the market.

Who is exempt from the cap?

Customers benefiting from the prepayment meter cap are exempt from the default tariff cap. In addition, the Act allows us to provide exemptions from the default tariff cap for:

(a) customers who benefit from a cap for those who appear to the Authority to be vulnerable by reason of their financial or other circumstances or
(b) SVTs which apply only if chosen by customers and if the tariff appears to the Authority to support the production of gas, or the generation of electricity, from renewable sources.

To prevent a step change in their current prices, we propose to protect those customers currently on the Warm Home Discount (WHD) safeguard tariff by moving them onto the direct debit default tariff cap.

We propose to provide the ability for suppliers to apply for a derogation from the cap for tariffs that provide additional support for renewable energy beyond the level already provided by government policies, and for which they incur material additional cost.

This consultation and other publications alongside it

This document, and its appendices, form a consultation on our proposed methodology for setting and updating the default tariff cap. We welcome stakeholders' views by **8 October**.

Alongside this consultation we also provide a **statutory consultation** on the proposed licence conditions for the default tariff cap and a draft notice of the baseline values and initial value of the CPIH index.

In additions we provide details of data we are disclosing to help stakeholders respond to both consultations. We have made some of this data publically available. We provide access to more sensitive data through a disclosure room.

1. Overview of the default tariff cap

In this chapter we discuss:

- the purpose of the default tariff cap
- the proposed cap level, and how it changes over time and
- the structure of this consultation.

Purpose of the default tariff cap

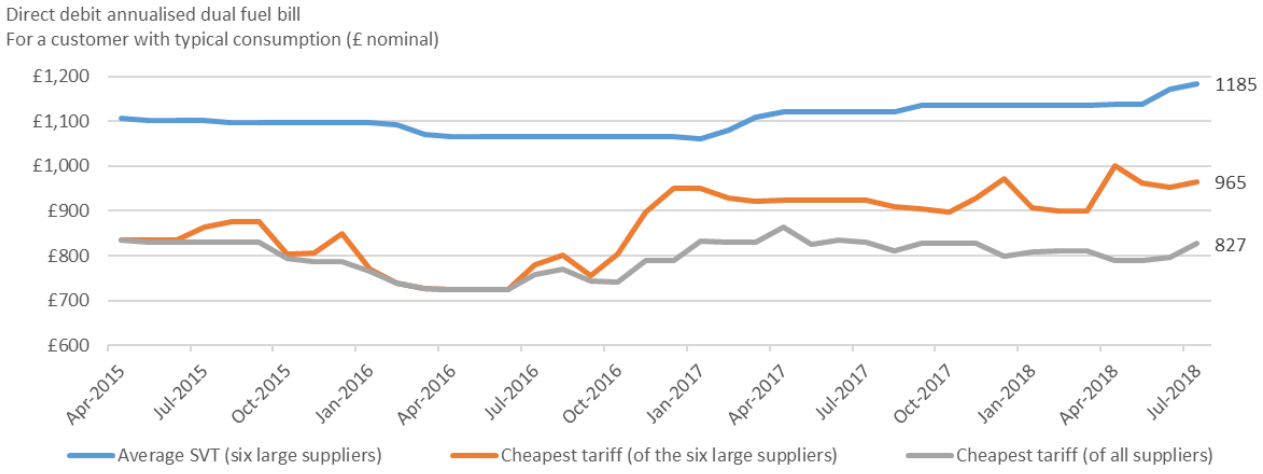
Default and standard variable tariff customers

1.1. The majority of household customers pay for their energy on SVTs or default tariffs. Around 60% of all household customers in 2017 paid default tariffs or SVTs (excluding customers with prepayment meters). The six largest suppliers have between 40% and 80% of their customers on default tariffs.[5]

1.2. Energy suppliers generally charge SVT customers considerably more than customers who choose FTs. In July 2018, the average SVT offered by large suppliers cost a typical consumer £1,185 if they paid by direct debit. This was around £220 more than the cheapest fixed-term tariff offered by those large suppliers, and £358 more than the cheapest tariff in the market (**Figure 1**).

1.3. In its investigation, the CMA concluded that suppliers had market power over SVT customers, because these customers tend to be less engaged in the market, switching to new energy contracts less frequently.

Figure 1: SVT prices offered by the largest six suppliers and FTs (2015 to present)



Source: Energylinx (until May 2017) and Energyhelpline (June 2017 onwards). Information correct as of August 2018
Notes: tariffs show GB average network costs. The typical domestic consumption value for gas reduced from 12.5 MWh to 12.0 MWh in October 2017. Updates provided in Ofgem, retail market indicators, https://www.ofgem.gov.uk/data-portal/retail-market-indicators#thumbchart-c7770745751913637-n95437
Note: this chart shows a simple average of the direct debit tariffs offered by the six largest suppliers. Based on announcements as at 31 August 2018, the weighted average SVT for these suppliers is £1,212 and £1,208 for the ten largest suppliers

[5]Ofgem, *State of the energy market 2017*, Figure 2.7
https://www.ofgem.gov.uk/system/files/docs/2017/10/state_of_the_market_report_2017_web_1.pdf

The Act

1.4. In July 2018, Parliament passed the Domestic Gas and Electricity (Tariff Cap) Act (the Act). The Act requires Ofgem to introduce a cap with a view to protecting existing and future customers who pay standard variable and default rates. By protecting SVT customers, we expect the cap to prevent them from being overcharged, and ensure they pay prices that more closely reflect the underlying cost of supplying them energy.

1.5. In protecting SVT customers, the Act requires us to have regard to the following matters:

- the need to create incentives for holders of supply licences to improve their efficiency
- the need to set the cap at a level that enables holders of supply licences to compete effectively for domestic supply contracts
- the need to maintain incentives for domestic customers to switch to different domestic supply contracts and
- the need to ensure that holders of supply licences who operate efficiently are able to finance activities authorised by the licence

1.6. The Act requires us to introduce the cap "as soon as practicable" after the Act has passed. Our aim is for the cap to come into force at the end of the year in order to provide protection to consumers this winter.

1.7. Under the Act, the cap will be temporary. In 2020, we must review whether the conditions are in place for effective competition, and publish a report, including a recommendation on whether the cap should be extended or not. The Secretary of State would then decide whether to extend the cap. If the cap is not removed, we would carry out further reviews in 2021 and 2022. If the cap is extended after each of our reviews, it will cease to have effect at the end of 2023.

Our work so far

1.8. As part of our analysis so far, we have published five working papers and a policy consultation in May.

1.9. We are grateful for stakeholders' responses to our May consultation. We received a substantial number of responses and have considered them carefully in developing the proposals set out in this consultation. We have published non-confidential submissions alongside this document and provided summaries of feedback in the relevant appendices to this document.

1.10. In this consultation we set our proposed design for the cap. We are not announcing the cap level. We will formally announce the level of the cap after reviewing consultation responses and issuing the final licence later in the year.

The proposed cap level

Propsed cap level

1.11. To help inform consultees, we provide an estimate of the cap level as at January 2019, based on our current proposals (**Table 1**).[6]

Table 1: potential cap levels in January 2019, including VAT, based on proposals

Cap	Fuel	Annualised standing charge	Annualised bill at typical consumption
Single rate, direct debit	Gas	£97	£539
	Electricity	£86	£597
	Dual fuel	**£183**	**£1,136**
Single rate, standard credit	Gas	£111	£573
	Electricity	£101	£646
	Dual fuel	**£212**	**£1,219**
Multi-register, direct debit	Electricity	**£86**	**£734**
Multi-register, standard credit	Electricity	**£101**	**£792**

Source: Ofgem

Note: We set the cap level based on analysis of 2017 (described in Chapter 2). We then updated to the cap level using the methodology set out in Chapter 3, to establish these proposed levels for a cap period from January to March 2019. Economy 7 customers have a higher Typical Domestic Consumption Value (4.2 MWh) than single rate electricity customers (3.1 MWh), so their typical bill is higher. Economy 7 customers actually pay less per unit of consumption than single rate customers do.

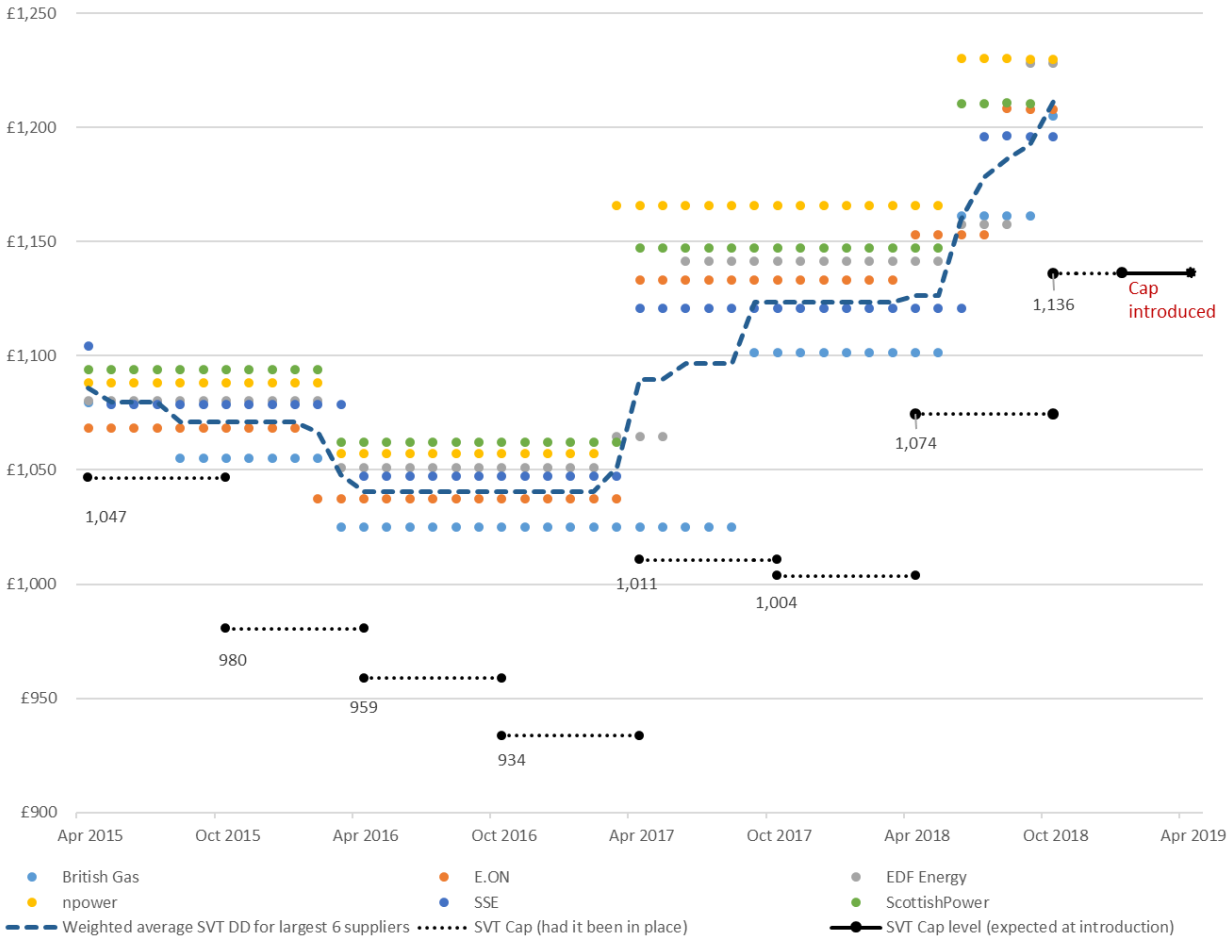
Tracking underlying costs

1.12. We expect the default tariff cap to provide a high level of protection – ensuring SVTs (that are priced at the cap) reflect more closely the costs of supplying energy than they have done in recent years. It is important to note that we propose to update the cap level every April and October. This ensures that it adjusts to the changes in underlying efficient costs.

1.13. **Figure 2** shows the illustrative cap levels for direct debit customers since April 2015, using our proposed methodology, had the Act been in force then. This shows that, although the exact amount in any given period depends on when suppliers update their prices as underlying costs change, the largest six suppliers' default tariffs have been systematically around £80 to £100 higher than our cap would have been.

[6] These prices included network costs at the national average rate. The cap will adjust for difference in network charges across 14 regions of the country, so specific cap levels will differ.

Figure 2: SVT prices for the six largest suppliers, and cap levels (2015 to 2019)



Source and notes: Energyhelpline data. SVT data between April 2015 and July 2018 shows the price of direct debit dual fuel paperless bills at typical domestic consumption (3.1MWh for electricity and 12.0 MWh for gas). The average shown is a weighted average of the six largest suppliers using their market share of direct debit SVTs in 2017. SVT prices between August and October 2018 show the latest price changes announced by suppliers, as of 31 August 2018. Cap levels before April 2017 include smart costs at 2017 levels – we have not adjusted them downwards, meaning the cap levels between April 2015 and March 2017 will be slightly overstated.

1.14. The scale of protection afforded to SVT customers is demonstrated through the following estimates. In 2017:

- 96% of SVT customers would have paid less under our proposed cap
- In total, SVT customers would have paid £1.3 billion less than they were charged in that year
- An average single rate dual fuel direct debit customer with typical consumption would have paid £94 less (ranging between £61 and £157 for the six largest suppliers) and a standard credit customer would have paid £89 less (ranging from £44 to £175 for the six largest suppliers) and
- On average, single fuel customers with typical consumption (ie those who have different gas and electricity suppliers) would have saved £79 on their gas bill and £39 on their electricity bill.

1.15. When we introduce the cap, customer savings will differ depending on how underlying costs and suppliers' prices change. We estimate SVT customers would save around £1.0 billion when the cap is introduced (assuming suppliers' prices remain at their current levels), lower than the £1.3bn we estimate that SVT customers would have saved in 2017. The total savings expected in 2019 is lower than in 2017, in part, because there are now fewer customers on default tariffs than in 2017, but mainly because suppliers' prices have not risen as quickly as wholesale prices have during this period. In practice, that means customers might save less, because they are currently being overcharged to a lesser extent. The protection of SVT customers afforded by the cap will be significantly greater than the initial level of savings. It will continue to protect SVT customers throughout its lifetime by ensuring their bills reflect underlying costs more closely than they have done in the past.

1.16. Underlying costs have been increasing since 2017. If it had been in place since 2017, the cap levels would have increased. This is mostly due to the global rise in oil prices feeding through to wholesale gas prices which impacts both household heating and electricity generation. We will update the cap to reflect these changes in underlying costs, which ensures that any price increases are justified. Equally, when the underlying costs fall then updating the cap ensures that the reductions are passed onto customers in their bills.

1.17. The amount customers save, will depend on the prevailing prices at the time the cap is introduced. Based on recent price announcements, we expect direct debit SVTs to reduce by £75 (in annualised terms, ranging from £57 to £138 depending on supplier) – less than in our 2017 analysis (**Figure 2**). This is because of the sharp increases in wholesale costs since 2017 and because prices have not increased by as muchas wholesale costs during this period. Regardless of suppliers' pricing, the cap will protect SVT customers from being overcharged, ensuring their bills reflect costs.

This consultation

1.18. This document provides an overview of our policy proposals for setting and updating the default tariff cap. In it we describe:

- **How we propose to set the cap level (Chapter 2):** we propose to set the cap using a bottom up assessment of the efficient costs of supplying energy. In this chapter we explain our proposed methodology for setting the cap and its design.

- **How we propose to update the cap level over time (Chapter 3):** we will update the cap over time, as it needs to reflect the increases and decreases in the underlying cost of supplying energy – for example, as a result of movements in wholesale prices. In this chapter we explain how we propose to update each cost component to ensure the changes in customers' prices are justified.

- **The impact of the cap (Chapter 4):** we have undertaken a broad range of analysis. This includes a scenario-based analysis, which assesses how the proposed cap level, as it would have been in 2017, would have affected the market. In this chapter, we explain why on the basis of the analysis we have undertaken we consider that our proposals satisfy the objective of the Act, and explain how we have had regard to the various needs identified in section 1(6) of the Act in arriving at our proposals.

- **Scope of the cap (Chapter 5)** whether the cap applies to a customer, or how it applies, will differ depending on some customers' circumstances. The Act provides Ofgem with the power to exempt certain groups and tariffs. In this chapter we explain how the proposed cap will affect different groups of customers.

- **Next steps (Chapter 6):** In this chapter we explain the consultation process, and how to access the data we will provide.

1.19. Alongside this overview we have published several appendices to the assist the consultation on our proposed methodology. We welcome stakeholders to submit their views on our methodology by **8 October 2018.**

1.20. We welcome consultees to provide their views on our methodology in general, or on specific aspects of it. Respondents are advised to structure their consultation response using the topics of our appendices, stating whether they agree with our approach. Each appendix focuses on different area of our methodology.

- Benchmark methodology (see Appendix 1)

- Cap level analysis and headroom (see Appendix 2)

- Updating the cap methodology (Appendix 3)

- Wholesale costs (Appendix 4)

- Policy and Network costs (Appendix 5)

- Operating costs (Appendix 6)

- Smart metering costs (Appendix 7)

- Payment method uplifts (Appendix 8)

- EBIT (Appendix 9)

- Exemptions from the cap (Appendix 10)

- Draft impact assessment (Appendix 11)

1.21. We also provide a **statutory consultation** on the licence conditions for the cap and a **draft notice** of the baseline values and initial value of the CPIH index.

2. Setting the baseline level for the cap

In this chapter, we explain:
- How we propose to set out cost benchmark
- How we propose to set the overall level of the cap

How we propose to set our cost benchmark

We propose to use a "bottom-up" cost assessment

2.1. We propose to set our cost benchmark using a bottom-up assessment of suppliers' costs. For each component of a customer's bill we propose to set an allowance, by estimating its efficient cost. This ensures our benchmark (and the cap) reflects the underlying costs of supplying energy. In setting the proposed benchmark, we have considered a range of information and evidence.

2.2. We have estimated a baseline benchmark and cap level for 2017. **Table 2** sets out our estimate of the efficient allowance for each cost component of a single rate electricity, gas, and dual fuel bill for a direct debit customer with typical consumption. We also provide the 2019 dual fuel update for comparison. As we discuss later, in certain allowances we have taken account of uncertainties or variabilities between suppliers as part of the allowance.

Table 2: 2017 direct debit default tariff cap baseline, and 2019 comparator

Cost component	2017 electricity single rate cap	2017 gas cap	2017 dual fuel (implied) cap	January 2019 cap
Wholesale	170	197	367	444
Policy costs	97	19	117	137
Network	135	122	258	258
Operating costs	79	90	169	189
Payment method	11	9	21	23
Normal profit	9	8	18	20
VAT	25	22	47	54
Benchmark	**527**	**469**	**996**	**1,124**
Headroom	5	5	10	12
Cap level	**533**	**474**	**1,007**	**1,136**

Source: Ofgem. *Supplementary model - default tariff cap level*
Notes: Numbers may not sum due to rounding. The 2017 baseline is the weighted average of two cap periods (April 2017 to September 2017, and October 2017 to March 2018). VAT is applied to headroom, but not shown separately in the table.

Overview

2.3. In this section, we explain our rationale and proposed approach for setting our cost benchmark. We discuss:

- the challenge of estimating an efficient cost benchmark
- the different methodologies we have considered
- how we propose to set allowances for wholesale, network, and policy costs
- how we propose to set allowances for suppliers' operating costs and profits and
- how we propose to set the benchmark for multi-register meters.

The challenge of estimating an efficient cost benchmark

2.4. To set our benchmark, we need to estimate efficient costs. An estimate of efficient cost allows us to protect SVT customers, ensuring they are not overcharged. Also, the Act requires us to have regard to the need for an efficient supplier to finance their licensed activities. In addition, the Act requires that we have regard to the need to create incentives for suppliers to improve their efficiency – encourage inefficient suppliers to reduce their costs.

2.5. Estimating an efficient benchmark is challenging, particularly one that is appropriate for the market as a whole, rather than a separate benchmark for each supplier (which is common in network price regulation). We face several challenges.

- We cannot directly observe efficient costs. Inefficient suppliers' actual costs will be too high. In its investigation, the CMA concluded that the six largest suppliers' costs (and profits) would have been lower, if competition was working more effectively.
- Different suppliers will have different efficient costs due to variation in their circumstances. For example, some suppliers may have lower costs because they have fewer single fuel customers than average).
- Suppliers' costs can be difficult to anticipate or volatile, making it harder to establish the efficient cost. This is particularly true of wholesale costs and the costs of environmental and social obligations.
- The comparability and reliability of data on costs also creates unavoidable uncertainty and risk. Suppliers wil generally not hold cost information will generally not be held in the exact form required, and price data can reflect factors unrelated to costs. In many cases suppliers wil not hold information related to the relevant economic variables at all.

Considering different methodologies

2.6. In our May consultation we set out four options for estimating our benchmark. To different extents they use data on market prices and/or data on suppliers' costs.

- **Market basket of tariffs (price-based):** we would set the benchmark using an average of competitive market tariffs.
- **Adjusted version of the safeguard tariff (hybrid of price and cost).** We would adjust the benchmark developed by the CMA for the prepayment meter cap (based on 2015 price and cost data for two mid-tier suppliers).
- **Updated competitive reference price (hybrid of price and cost).** We would use the same broad methodology as the CMA, but use more recent data (2017) from a larger sample of suppliers.
- **Bottom-up cost assessment (cost-based).** We would estimate efficient allowances for each cost category based on exogenous and supplier cost data.

2.7. Most stakeholders favoured the bottom-up cost assessment over the hybrid price reference approaches. The reasons given included greater transparency, greater accuracy and lower risk of error – particularly for direct costs such as wholesale and networks (which make up the majority of costs), greater ease of communication to stakeholders, and the ability to give a fuller representation of the costs across all suppliers.

2.8. Stakeholders' primary concerns about the accuracy of our benchmark (independent of the methodology used) related to whether operating costs sufficiently allowed for the variation in suppliers' customer bases, and whether the cap allowed for wholesale costs sufficiently.

2.9. Our main reasons for proposing to proceed on the basis of a bottom up approach are:

- The greater accuracy with which this approach can be updated. Because the cap is already broken down into separate components, we can update each one using the relevant data. In contrast, the reference prices are aggregated estimates.
- The greater transparency makes it easier to assess each cost component in turn, and understand potential sources of uncertainty, which means we can better consider whether a level of headroom is required, or not. In contrast, under an updated competitive reference price approach, we can be less certain about precisely what costs have been priced into the tariffs informing our benchmark.
- We consider that many of the key challenges of reliably estimating efficient costs are common to a bottom up and updated competitive reference price approaches.

2.10. We do not consider a bottom-up approach to be more prone to error than the alternatives. However, we recognise it has potential disadvantages compared to the updated competitive reference price approach. Solely relying on cost data risks erroneously overstating (or excluding) cost components, particularly as suppliers have an inherent advantage when they present and explain their costs (given the complexity and number of costs incurred by suppliers, and the fact that these change over time).

2.11. However, we have sought to mitigate the risk that we unintentionally overstate costs. By developing estimates using both the updated competitive reference price and bottom up cost assessment methodologies, we can compare them and consider how they might be influenced due to factors simply relating to their methodology. If our cost assessment benchmark was considerably higher than our updated competitive reference price estimate, it might suggest that we had double counted some costs, or used inflated data.

2.12. However, in fact, the benchmarks produced by the two methodologies are very similar, which gives us confidence that there is no significant double counting. We therefore do not consider that this disadvantage (asymmetry of information) outweighs the benefits of using a bottom up approach.

2.13. For a detailed discussion of our benchmark methodology, our rationale for proposing to proceed on the basis of the bottom-up approach, and stakeholders' views, please see Appendix 1 - Benchmark methodology.

Setting allowances for wholesale, network, and policy costs

2.14. For wholesale, network and policy costs we propose to set allowances mostly based on external data (ie not from suppliers). This reduces the risk that we overstate costs.

Wholesale costs

2.15. We propose to set the wholesale allowance in two parts:

- costs based on the prices of forward energy contracts and
- additional allowances, for costs not captured in our analysis of forward contracts.

2.16. We propose to use the weighted average cost of contracts for delivery over a 12 month period starting on the first day of the cap period. We observe the prices for that 12 month 'forward view' during a six month observation period, which starts eight months before the first day of the day of the cap period.

2.17. We propose to provide four additional allowances:

- **Shaping, forecast error, imbalance, and transaction costs**: 5.9% (of the forward contract cost) for electricity and 4.3% for gas. These allowances cover the additional costs of shaping contracts to match customers' demand.
- **Additional uncertainty:** 1.0% (of the forward contract cost) for electricity and 1.0% for gas. We propose to provide this additional allowance to help suppliers manage additional exposure to volatility and risk, not already accounted for.
- **Losses:** 0.96% (of the forward contract cost) for underlying gas losses – known as "unidentified gas". We propose to account for regional electricity losses as an input when calculating wholesale, policy, and network cost allowances.
- **Capacity Market:** we propose to pass-through the domestic market's share of Capacity Market auction costs.

2.18. In **Table 3** we provide the breakdown and values of the proposed wholesale allowances. In Appendix 4 – Wholesale costs we provide further detail on our proposal, methodologies, a summary of stakeholders' responses to our May consultation, and our consideration of them.

Table 3: 2017 wholesale cost allowance and 2019 comparator for dual fuel

Cost component	Electricity multi-register	Electricity single rate	Gas single rate	Dual fuel (implied)	January 2019 cap
Forward contracts	192.5	141.6	185.2	**326.7**	**390.7**
Allowances	12.1	8.9	8.6	**17.5**	**20.8**
Uncertainty	1.9	1.4	1.9	**3.3**	**3.9**
Losses	19.2	14.3	1.9	**16.2**	**18.0**
Direct fuel	225.7	116.2	197.4	**363.6**	**433.4**
Capacity Market	3.4	3.6		**3.4**	**11.1**
Wholesale	**229.3**	**169.6**	**197.4**	**367.0**	**444.5**

Source: Ofgem, *Annex 2 - Wholesale cost allowance methodology*

Notes: Forward contracts are calculated based on transmission and National Balancing Point (NBP) volumes. Allowances and uncertainty are applied as percentages, before uplifting the sum of the forward contracts, allowances, and uncertainty by losses.

2.19. In response to our May consultation, suppliers emphasised that wholesale costs are uncertain and volatile, and that the cap should account for this. We propose to account for this in several ways. We have taken prudent assumptions in our modelling of shaping costs and typical forecast error due to weather. We also propose to provide an additional allowance for uncertainty on top of our modelling, including the costs of managing exposure to changes in the winter-summer spread (which we refer to as 'basis risk').

2.20. We consider whether to address any residual uncertainty when setting the headroom allowance and how we propose to update the cap to account for unforeseen trends in efficient costs (Chapter 3, and Appendix 3 – Updating the cap methodology).

Wholesale cost – setting the first cap allowance

2.21. In our May consultation we proposed a transitional arrangement, where we could set the direct fuel allowance for the first cap period using a different observation window from the one we would normally use to analyse forward contracts. We now propose to use our standard approach for a winter cap period, observing prices offered between February and July 2018 for contracts that would be delivered between October 2018 and September 2019.

2.22. We propose to use this approach to ensure the wholesale allowance better reflects the underlying costs that suppliers are likely to have incurred when purchasing energy for delivery during the first cap period. Large suppliers have most likely already bought much of the energy SVT customers will use in early 2019. Now that the wholesale

market has increased since April 2018, our initial approach risked customers paying significantly more than suppliers' underlying costs. Had market prices reduced, our May proposal would have risked setting the wholesale allowance below suppliers' actual costs, and would have needed correcting. We discuss this issue in further detail in Appendix 4 - wholesale costs.

2.23. As the cap progresses we expect suppliers to change their historical purchasing strategies to ones that more closely reflect the costs set by our allowance. It is important to note that the direct fuel allowance is not, in itself, a 'hedging strategy'. Its purpose is to set a realistic allowance for purchasing energy.

Network charges

2.24. Suppliers are charged for the costs of building, maintaining and operating the energy network and system infrastructure used to deliver energy to their customers. As the networks are largely monopoly businesses, we regulate the prices that the network companies are able to charge by controlling the companies' allowed revenues. The network charges paid by suppliers vary depending on where their customers live, what type of electricity meter they have and how much energy they use.

2.25. We propose to set the network allowance by combining information on charges from network companies' charging statements with assumptions about demand and losses to estimate the costs to a supplier for each customer type. We use broadly the same model we use to calculate and update the existing safeguard tariffs, as applied in the CMA's methodology. Our propsed network allowance will vary for different areas of the country because network costs differ by region.

2.26. In response to our May consultation, we propose two adjustments to our initial proposal. Firstly, we propose to include revised estimates of distribution and transmission losses. Secondly, we propose to revise estimates of the share of consumption which takes place in winter. Both of these adjustments improve the accuracy of the allowance. Please see Appendix 5 - Policy and network costs for further detail on our approach, and stakeholders' views.

Policy (environmental and social obligation) costs

2.27. Energy suppliers are subject to a number of environmental and social obligations, designed to achieve a variety of different policy goals. In most cases, these obligations result in additional costs to suppliers, which are then passed on to gas and electricity customers via their energy bills.

2.28. To set the allowance for these costs, we propose using data published by administrators of the different schemes to calculate the cost per customer and per MWh in the base period. Some suppliers are exempt from these costs. We propose to set the allowance based on the costs that we would expect a fully-obligated supplier to incur in steady state. Please see Appendix 5 – Policy and network costs for further detail on our methodology and consideration of stakeholders' views.

Setting allowances for suppliers' operating costs and profits

2.29. After considering wholesale, network, and policy costs, we propose to provide allowances for:

- operating costs per customer
- the additional costs of standard credit customers and
- a normal level of profit.

2.30. We consider that suppliers are already incurring smart meter costs as part of their normal operations, so consider they are already in the operating cost baseline. In Chapter 3 we propose using a different approach to update these costs compared with other operating costs.

2.31. **Tables 4 and 5** breakdown our proposed direct debit and standard credit benchmarks into their different cost components. We propose different caps for direct debit customers and standard credit customers, taking into account the additional costs of providing standard credit. Suppliers' operating costs are higher when serving a standard credit customer, so they charge higher prices. Existing licence conditions ensure these higher standard credit prices only recover costs inherent to the respective payment method.

Table 4: 2017 direct debit efficient benchmark and 2019 comparator (£)

Cost component	Electricity multi-register	Electricity single rate	Gas single rate	Dual fuel (implied)	January 2019 cap
Wholesale, network, and policy costs	501	402	339	**741**	**839**
Operating cost per customer	79	79	90	**169**	**189**
Standard Credit costs allocated to all customers	13	11	9	**21**	**23**
Profit	11	9	8	**18**	**20**
VAT	30	25	22	**47**	**54**
Direct debit efficient benchmark	**634**	**527**	**469**	**996**	**1124**

Source: Ofgem, Supplementary model - default tariff cap level
Notes: Excludes headroom. The cap levels use GB average network costs.

Table 5: 2017 standard credit efficient benchmark and 2019 comparator (£)

Cost component	Electricity multi-register	Electricity single rate	Gas single rate	Dual fuel (implied)	January 2019 cap
Wholesale, network, and policy costs	501	402	339	**741**	**839**
Operating cost per customer	79	79	90	**169**	**189**
Standard Credit costs allocated to Standard Credit customers	60	53	38	**91**	**99**
Profit	12	10	9	**19**	**21**
VAT	33	27	24	**51**	**57**
Standard credit efficient benchmark	**684**	**571**	**500**	**1071**	**1206**

Source: Ofgem, Supplementary model - default tariff cap level
Notes: Excludes headroom. The cap levels use GB average network costs.

Operating costs per direct debit customer

2.32. We propose to set the operating cost allowance based on our benchmarking analysis, which compares different suppliers' historical expenditure. For 2017, we estimate an efficient level of operating costs to be equal to £79 per customer per year for electricity and £90 for gas (£169 per dual fuel account). We propose to update this allowance over time to reflect the latest trends in inflation and the costs of the smart metering rollout.[7]

2.33. Operating costs are the component of an energy bill over which suppliers have greatest control. Variation in these costs between suppliers is the key source of the inefficiency in the retail market that the CMA identified following its detailed investigation. We define operating costs as a supplier's own costs of retailing energy, excluding the costs of purchasing energy, the cost of meeting environmental and social obligations, and network charges. In many cases these costs are indirect, in the sense that they are shared across the customer base, rather than being attributable to single accounts.

2.34. As proposed in our May consultation we propose to benchmark suppliers' costs, comparing their reported operating costs per customer in 2017. We propose to do this at the aggregate level (not separately analysing different types of costs, such as metering and billing). We propose to exclude suppliers with fewer than 250,000

[7] Note that we set the operating cost allowance for an historical cap period (April 2017 to September 2017). To calculate the 12-month 2017 baseline we update the allowance using CPIH and take a weighted average of the two periods (April to September 2017 and October 2017 to March 2018).

customers (in 2017), and to exclude five other suppliers, which for various reasons are not likely to be representative of typical firms in the sector.

2.35. In response to feedback, we now also propose to compare the average cost per account (treating dual fuel as two accounts) rather than analysing gas and electricity separately. We also propose to adjust suppliers' operating costs to reflect the number of customers they supply that use standard credit or prepayment. These adjustments help ensure we base our proposed allowance on like-for-like comparisons between suppliers, improving accuracy. We propose to allow for the additional costs of standard credit customers separately, through the payment method uplift.

2.36. Costs vary significantly between suppliers, even after controlling for differences in payment methods. If we knew the variation in costs was *only* due to relative efficiency or inefficiency, we could set the allowance at the level of the lowest cost supplier. In response to our consultation, some stakeholders were concerned that the lowest cost suppliers were not more efficient, but had customer bases with atypically low costs. They felt basing an allowance on these suppliers would understate typical efficient costs.

2.37. We propose to set the allowance above the level of the lowest cost supplier in our sample. In our view, factors other than efficiency are likely to drive some, but not all, of the variation in reported operating costs per customer between suppliers. For instance, some suppliers have more customers on the Priority Services Register, and more with single fuel accounts. These factors are features of the market, which suppliers appear to have limited control over. They also appear to increase suppliers' costs, although it is difficult to establish exactly how much they increase *efficient* costs.

2.38. We propose to set the operating cost allowance based on the lower quartile of costs for suppliers in the benchmarking sample in 2017, minus an efficiency factor equivalent to £5 for a dual fuel customer. This proposed allowance reflects a level of operating costs that is approximately 15% higher than the frontier, ensuring that we account for variation in suppliers' efficient costs. On balance we also consider that an efficient supplier with an average customer base would likely have operating costs below the lower quartile. Therefore, even after accounting for the uncertainty affecting our estimates of efficient costs, we consider setting the allowance at such a level would not be appropriate. We consider an efficiency factor of £5 per dual fuel account would create better incentives to improve efficiency. For further details on our proposed approach to operating costs and stakeholders' views see appendix 6 – Operating costs.

Setting allowances for the additional costs of standard credit customers

2.39. We propose to set different caps for customers paying by direct debit and standard credit. The standard credit cap would be higher, reflecting some of the additional efficient costs of providing standard credit to customers.

2.40. Our proposed operating cost allowance is based on the efficient cost of serving direct debit customers only. We also need to include an allowance for the cost of providing standard credit. Suppliers incur higher costs when serving standard credit customers.

2.41. We calculate that the additional cost of supplying a standard credit customer was £131 in 2017 for an efficient supplier. This reflects the additional working capital requirement (£31), additional bad debt (£56), and additional administrative costs, for instance of managing bad debt and customer contact time (£42).

2.42. In our May consultation we suggested using a payment method differential (ie. the difference between direct debit and standard credit prices) substantially below the efficient additional cost of standard credit customers, and below the price differentials offered by suppliers. To calculate that differential we only allocated the additional working capital costs to standard credit customers, and spread the other additional costs across all customers.

2.43. Stakeholders (suppliers and consumer groups) agreed with our proposal to allocate the additional working capital requirements to standard credit customers only. These costs are a necessary consequence of providing credit to customers, which means a greater proportion of customers' payments are in arrears.

2.44. However, suppliers disagreed with our proposal to spread all of the additional bad debt and administrative costs across all customers. They were concerned about the distortive effects this approach might have on competition, their ability to recover costs, and customer incentives to use more cost-effective payment methods. In our consultation we said we would analyse further the impact on suppliers' costs and customers' incentives.

2.45. Having considered responses to the consultation, we now propose to set the payment differential in our 2017 baseline broadly in line with the average differential in the market in 2017 (£76). We set the differential by allocating all of the additional working capital costs to standard credit customers, and 40% of the additional bad debt and administrative costs. **Table 6** shows how we propose to allocate the additional efficient costs of providing standard credit.

Table 6: Breakdown of payment method uplifts for additional standard credit costs

Component to additional SC cost	Additional cost	Allocation of costs	Uplift to SC bill	Uplift to DD bill	Difference
Working capital	31	100% to SC	31	0	31
Bad debt	56	40% to SC exclusively; 60% spread	33	12	21
Administrative costs	44	40% to SC exclusively; 60% spread	26	9	17
Additional cost	**131**	**N/A**	**91**	**21**	**70**
Impact of profit, VAT, and headroom	10	N/A	6	1	5
Total impact on cap	**140**	**N/A**	**97**	**22**	**75**
Baseline cap levels	N/A	N/A	1,082	1,007	75
2019 comparison	N/A	N/A	1,219	1,136	83

Source: Ofgem, *Supplementary model – payment method uplift*

Notes: Figure do not sum, due to rounding. "SC" refers to standard credit. "DD" refers to direct debit.

2.46. Due to increases in underlying costs, we expect the payment differential to be around £83 when the cap is introduced. Bad debt and working capital costs are calculated as a percentage of a customer's bill, so they scale with changes in bills. The differential will narrow whenever underlying costs reduce.

2.47. We consider our proposal to adequately balance opposing conceptions of cost-reflectivity. In response to feedback, clear arguments for cost-reflectivity were made for both lower and higher differentials. From an individual's perspective, a standard credit customer may not be responsible for additional bad debt costs or administrative costs. However, standard credit does increase the likelihood that customers make late payments or need to contact their supplier. Higher costs are a consistent and predictable consequence of providing standard credit. We consider that our proposal better balances these opposing arguments than did our May proposal.

2.48. We do not consider reducing payment method differentials is necessarily an effective way to protect vulnerable customers. In our May policy consultation we highlighted the impact of this proposal on potentially vulnerable customers. We recognise that standard credit customers are more likely to be fuel poor (although the majority are not fuel poor). However, more than twice as many fuel poor customers pay by direct debit than pay by standard credit, and they would pay more if the differential between the driect debit cap and standard credit cap was lower. Stakeholders did not think that a low price differential, thereby increasing direct debit bills, would protect vulnerable customers effectively. Please see Appendix 8 - Payment method uplift for further detail on our methodology, rationale, and stakeholders' views.

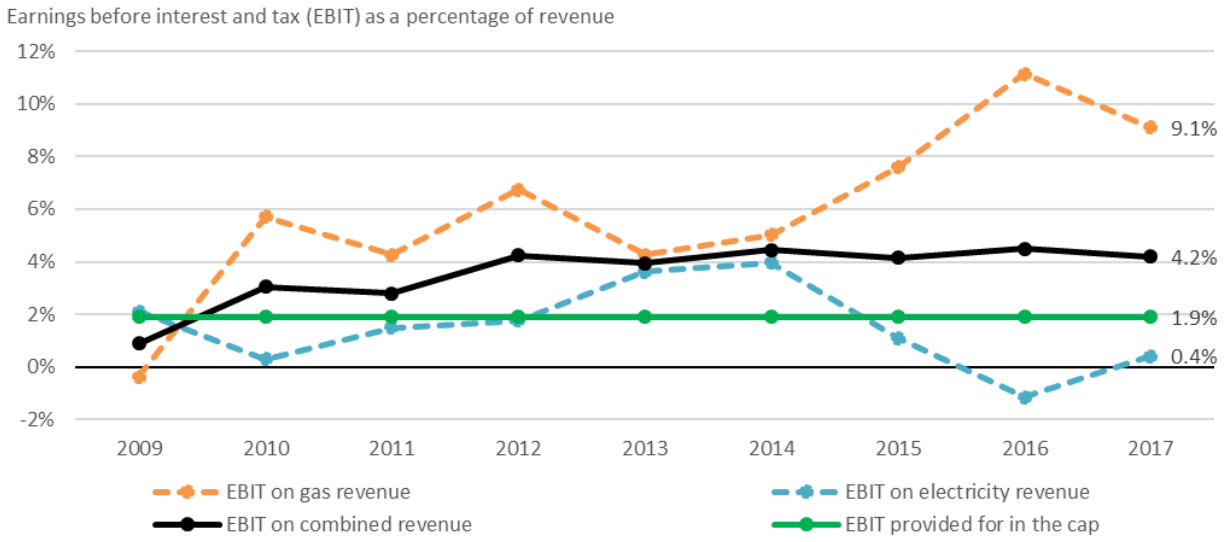
Normal profits

2.49. We propose to set a profit allowance at 1.9% before interest and tax. An efficient supplier should make a normal level of profit to finance its activities. This allowance is based on the profit level calculated by the CMA in its energy market investigation, for a supplier that does not use a third party to manage its wholesale arrangements (ie a supplier with additional working capital requirements).[8]

2.50. We propose to apply this profit margin to gas and electricity equally. In recent years, suppliers made large profits on gas and low profits or losses on electricity (**Figure 3**). Equalising the profit margins means that gas bills will no longer subsidise electricity bills. Therefore gas prices should reduce by a larger amount than electricity prices. In some cases electricity bills may increase, but for dual fuel customers that should be offset by gas bill reductions. Please see Appendix 9 - EBIT for a detailed discussion of the methodology, stakeholders' views, and our rationale.

[8] CMA, *Energy market investigation.* https://www.gov.uk/cma-cases/energy-market-investigation#final-report

Figure 3: Profits on domestic gas and electricity (2009-2017)



Source: Ofgem analysis of suppliers' Consolidated Segmental Statements.

Setting the overall level of the cap (including headroom)

2.51. In our May consultation we suggested we might set the overall level of the cap higher than our cost benchmark; the difference between the cap and the efficient benchmark is known as "headroom". We considered a range of cap levels between £0 and £80 above a benchmark based on the lowest cost suppliers in the market (the frontier).

2.52. We suggested three reasons we might set a cap higher than the efficient benchmark:

- uncertain costs, not accounted for in the benchmark
- variation in efficient costs and
- to support switching.

2.53. Most stakeholders, but not all, believed the cap should include headroom for some or all of the reasons we suggested. In particular, to cover the costs of unavoidable uncertainty in setting the benchmark, unexpected shocks to costs, and variation in the efficient costs to serve different customer bases. Most suppliers argued that headroom was required to support competition and switching.

2.54. Some stakeholders commented on the range of cap level scenarios included in our May consultation. There was a wide range of views on the optimal level, with some suppliers suggesting that headroom in the order of £70 to £100 (as measured against the 'efficient frontier') was required in order to support switching.

2.55. In our May consultation we explained that we cannot make a judgement about headroom independently of our assessment of our cost benchmark. We need to take decisions on these two issues together, with all factors being considered in the round. This is because different approaches to setting the benchmark have different levels of

uncertainty, and could account for variation in efficient costs differently. Our proposal considers what combined effect our proposed benchmark and headroom has on managing uncertainty, the Act's objectives, and the various matters set out section 1(6) of the Act.

The cap includes 'headroom'

2.56. We propose to include £10 of headroom on top of our 2017 baseline for a dual fuel direct debitcustomer. We propose to apply this headroom as a percentage (1.45%) and apply it to all cost components except network costs. There are a number of other cost components in the benchmark that vary regionally (beyond networks). We are proposing that headroom is applied to these cost components due to the uncertainty associated with them. As a consequence of this, in our proposed approach, headroom will vary slightly by region.

2.57. At this stage, we do not propose to vary the headroom percentage over time. We may revisit this issue when making recommendations about the removal of the cap to the Secretary of State, as part of the transition out of the default tariff cap regime.

2.58. Taking our proposed headroom allowance and benchmark together, we propose to include £36 (before including the impact of VAT) in our baseline for uncertainty and variation in efficient costs (**Table 7**). This is in the middle of the range for potential headroom (as measured against the efficient frontier) we presented in our May consultation.

Table 7: Components of direct debit dual fuel benchmark 2017 – allowances for variation and uncertainty

Cost component	Efficient frontier	Additional allowances[1]	Total
Wholesale	364	3	367
Policy	117	0	117
Networks	258	0	258
Operating costs	146	23	169
SC costs allocated to all customers	21	0[2]	21
EBIT at 1.9%	17	1	18
VAT @ 5%	46	1	47
Benchmark	**968**	**28**	**996**
Headroom	0	10	10
VAT @ 5%	0	1	1
Total impact on DD customers	**968**	**39**	**1007**
Excluding VAT	922	36	959

Ofgem analysis, 2018

Notes:

1. The additional allowances only show specific allowances for uncertainty and the difference between the frontier and our benchmark costs. Other aspects of our methodology (including conservative assumptions) will reduce the impact of uncertainty, but they are not shown here. For instance, our analysis shows that policy cost forecasts in the three years between 2015 and 2017 tended to be higher than actual costs (see Appendix 5 (Policy and Network costs) and our approach for the standard credit cost is conservative (see note 2)
2. For standard credit we use the lower quartile to set efficient costs. For standard credit customers (not shown here) the uplift is £9 higher than had we used the frontier supplier (for each additional cost component). If we were to take the frontier cost for each additional cost component separately, then the frontier benchmark for both direct debit and standard credit caps would be lower.

Considering headroom

2.59. Our proposed benchmark already includes allowances for uncertain wholesale costs (1.0% of direct fuel costs, equivalent to £3 in 2017) and takes into account variation in suppliers' efficient costs (providing an additional £23 compared with the frontier costs). We have taken this into account when setting the proposed headroom allowance, which provides for uncertainty not accounted for in the benchmark.

2.60. We consider that the overall level of the cap provides sufficient incentives for customers to switch contracts. We do not consider there are strong arguments for providing any additional headroom so that suppliers with high costs can offer cheap fixed tariffs by charging SVT customers more, and we consider that would not be in accordance with the the Act. In any case, we consider there will be incentives for customers to switch and the ability for many suppliers to support competition, at the proposed cap level.

Variation in efficient operating costs

2.61. In its investigation, we note that the CMA concluded that much of the variation between suppliers' costs was due to differences in their efficiency. We consider inefficiency to be the main reason for variation between suppliers' operating cost per customer. However, factors other than efficiency are likely to drive some, but not all, of the variation in reported operating costs per customer between suppliers.

2.62. Some suppliers may have atypical customer bases that are potentially more expensive to serve than the 'typical' customer base. However, other suppliers will have less expensive customer bases than assumed when setting the benchmark. Increasing the cap for a supplier with an atypical customer base risks increasing the ability for all other suppliers, including ones with typical customer bases, to overcharge.

2.63. We do not consider that additional headroom is required for variation in efficient operating costs, as it has been considered already in the proposed benchmark. We have not proposed benchmarking suppliers to the lowest costs we observed. We propose an operating cost allowance that is 15% higher than the level of the lowest cost suppliers in our sample. This recognises that the frontier suppliers may have lower costs, at least in part, because their customers are inherently cheaper to serve. For instance, the frontier companies have fewer single fuel customers and fewer customers on the Priority Service Register (a register of vulnerable customers who receive certain additional services). Even taking this into account, our assessment suggests that an efficient supplier with an average customer base would likely have operating costs below the lower quartile. To this extent, we propose to deduct an additional £5 per dual fuel customer to sharpen incentives to improve efficiency.

2.64. For operating costs, we also compared the difference in operating costs per direct debit customer between suppliers near and above the lower quartile. Within this group of suppliers, the composition of their customer base appears to have little relationship to their costs. We do not consider headroom as necessary to account for variation in efficient operating costs above our benchmark.

2.65. For additional standard credit costs we analysed the extent to which a supplier would be disadvantaged if they had a higher proportion of standard credit customers than average, but efficient costs to serve each standard credit customer. Few suppliers would have higher costs than the level provided for by the benchmark and the impact is very low. Now that we maintain price differentials at the market average, this effect

has reduced. We do not consider it to be consistent with the Act to provide headroom for this exposure, as it would increase bills for all customers, reducing protection.

Uncertainty

2.66. As described above, it is inherently uncertain what future efficient costs will be, and how efficient costs vary between different suppliers.

2.67. In our proposed benchmark we explicitly include some allowances for uncertain wholesale costs. We have also designed the benchmark, and used conservative assumptions, in a way to minimise exposure to uncertainty and volatility.

- Our proposed wholesale allowance is based on a hypothetical prudent supplier who takes reasonable steps to manage their wholesale risks before delivery. Our shaping and forecast error compares actual outturn data and seasonal normal demand to capture typical variability. We propose to provide an additional 1% of wholesale costs to cover further risk. See Appendix 4 – wholesale costs.

- Suppliers were concerned about variability in policy cost forecasts. We have sought to minimise this by using the best available information from administrators in relation to the expected costs of each scheme (see Appendix 5 - Network and Policy costs). Our analysis found that between 2015 and 2017 forecasts have tended to overstate suppliers' actual costs, mainly due to Feed-in tariffs and the Energy Company Obligation. We expect that differences between forecasts and outturn costs in any given period will tend to offset each other over the lifetime of the cap.

- We propose to calculate operating costs per account considering all accounts together, rather than gas and electricity separately. We consider this conservative, as the benchmark will not reflect suppliers that are particularly efficient at serving one type of account. See Appendix 6 – operating costs.

- Uncertainty and variation in suppliers' rollout of smart meters and their installation costs does introduce uncertainty in both directions. We discuss in the next chapter that we intend to update these assumptions in 2019 to reduce exposure to uncertainty. See Appendix 7 – Smart metering costs.

- We propose to use lower quartile costs, rather than frontier costs, to calculate the additional efficient costs of serving standard credit customers. This accounts for the uncertainty in calculating these costs and potential variation between suppliers and over time. See Appendix 8 – payment method uplifts.

2.68. We nevertheless propose an additional headroom allowance (1.45% – equivalent to £10 in the baseline, and £12 in 2019, for a dual fuel direct debit customer), to reflect the residual uncertainty that we consider affects the cap. Known sources include:

- Managing volatility in how actual costs are incurred compared to the cap, for instance due to forecast errors.

- Inherent uncertainty in future events, for example, unexpected weather events, bad debt costs from a supplier failure, or new policy initiatives.

- The intrinsic uncertainty in our modelling, given that efficient costs cannot be directly observed.

Incentives to switch and enabling suppliers to compete

2.69. We consider the incentives provided to customers to switch from the perspective of the market as whole, not individual suppliers' ability to provide those incentives. We do not propose to provide additional headroom so that suppliers with higher costs can continue to offer cheap FTs by charging SVT customers more. We consider that doing so would not be consistent with the Act.

2.70. We consider that not all suppliers require the allowances included in our benchmark. Some suppliers will have lower operating costs, due to their efficiency or customer base, meaning they do not require the full allowance. Some may have fewer standard credit customers, meaning they do not require all of the payment method uplift on direct debit tariffs. These suppliers will be able to offer cheaper tariffs, providing customers incentives to switch.

2.71. We expect our proposed cap level to provide incentives to switch, but switching rates are likely to reduce from their current levels. Our proposed cap level will reduce SVT prices, so the difference between FT prices and SVT prices will reduce, limiting the savings from switching. Also with fewer suppliers offering cheaper FTs, customers may be less likely to switch. However, we do not consider these potential impacts justify providing additional headroom, which would need to be funded by customers on default tariffs.

2.72. In Appendix 2 - Cap level analysis and headroom we provide more detail on our proposals, stakeholders' views, and our analysis of the potential impact of the cap.

Setting the default tariff cap at different consumption levels

Varying the cap with consumption

2.73. Customers' bills vary with their consumption. Most tariffs on the market have a variable charge and fixed charge (standing charge). The variable charge increases a customer's bill in line with the amount of energy they use. The standing charge increases a customer's bill a fixed amount each day.

2.74. We propose that the default tariff cap varies with customers' consumption. We would provide an implied maximum standing charge and maximum variable charge (Table 8).

Table 8: Maximum standing charge and unit rate for 2017 baseline

	Electricity Multi-register	Electricity Single rate	Gas
Standing charge (p per day)	21.4	21.3	24.0
Unit rate (p per kWh)	13.4	14.5	3.2

2.75. To ensure the default tariff cap varies with consumption, we propose to set the cap at typical consumption (as described above) and at nil (zero) consumption. The cap for all other consumption levels is defined by a straight line between the cap at nil consumption and the cap at typical consumption.

Setting the standing charge

2.76. By setting the cap at nil consumption, we would in effect cap the standing charge (stated in annualised terms). We propose to set the baseline 2017level of the cap at nil consumption in line with market prices in 2017. This gives a benchmark (excluding headroom) of £164 for a dual fuel direct debit customer (which would be £181 during the first cap period in 2019 under our current proposal).

2.77. We considered setting the standing charge using a bottom-up cost assessment; using the same approach we use at typical consumption. We estimate that this would lead to a cost-reflective standing charge of £225 for a dual fuel, direct debit customer at nil consumption.

2.78. If suppliers priced to the cap, this would be a significant departure from how suppliers currently set their prices at nil consumption. For example, in June 2017, large suppliers set direct debit prices at nil consumption for variable tariffs between £116 and £190. Market prices at nil consumption were therefore materially lower than our proposed benchmark methodology would indicate. They range significantly between suppliers, in a way which does not appear to be linked to variation in suppliers' operating costs.

2.79. We do not consider below-cost prices at nil consumption to be a source of consumer harm. If we set a cost-reflective cap at nil consumption, this could lead to suppliers increasing their standing charges. This would be an unintended consequence of the cap, negatively affecting consumers with low consumption. In order to protect these consumers, we consider that the least disruptive approach is to take account of market prices when setting the benchmark at nil consumption.

Providing a derogation for low consumption customers

2.80. In our May consultation we recognised that our intended design might reduce suppliers' ability to provide tariffs with low or no standing charges. In these cases, low standing charges are offset with higher unit rates, which might not be possible under the cap. These tariffs can benefit consumers with low consumption. Even if we leave standing charges at the market average level, there is a risk that some standing charges would increase, and tariffs for low consumption customer could be removed from the market. It would be an unintended consequence of the cap if protection for low consumption customers reduced.

2.81. The existing safeguard tariff has a derogation and rebate process for tariffs with low standing charges. This approach allows higher unit rates, if a customer would not pay more than the total cap level (unit and standing charge combined). This would allow suppliers to continue offering tariffs for low consumption customers.

2.82. For the default tariff cap, we propose to use the same derogation process that exists for the existing safeguard tariff. Suppliers should submit to Ofgem for a derogation on their tariffs.

3. Updating the default tariff cap

In this chapter, we explain:

- how we propose to update the default tariff cap to reflect changes in underlying costs
- how we could consider unforeseen trends in efficient costs and
- how we might assess whether to remove or extend the cap

How we will update the cap

Routine updates to the cap

3.1. The cap should ensure that customer bills reflect the underlying costs of energy. Many of the costs of supplying energy vary significantly over time, often for reasons outside of suppliers' control. For this reason, we propose to design the default tariff cap in a way that allows us to update the cap periodically to reflect trends in efficient costs. If we did not update the cap, customers could be over-charged, or under pay for the energy they consume.

3.2. The Act requires that we – at least once every six months while default tariff cap conditions have effect – review the level at which the cap is set. Given the objective of the Act to protect SVT customers, and the matters set out in section 1(6) of the Act, our key considerations in designing the process for updating the cap are to ensure:

a) **that the cap tracks changes in efficient costs over time.** This will ensure that where costs rise, suppliers that operate efficiently are able to finance their activities – and where costs fall, that customers on default tariffs are protected from excessively high prices. Because an efficient level of costs cannot be directly observed, and must be estimated, the appropriate level of the cap will be subject to some uncertainty. We will take this into account when designing the update process (and particularly the need for any reviews).

b) **that the cap does not create unintended incentives for suppliers that are detrimental for consumers**. This includes ensuring that the mechanism used to update the cap does not reduce the incentive for suppliers to improve their efficiency by cutting costs, or their incentive to compete for new customers by reducing their prices or offering better levels of service.

3.3. Below we set out proposals to relating to:

- The frequency and timing of updates.
- Our proposed approach to making routine updates to the cap

Frequency and timing of updates

3.4. We propose to update the cap every six months, on 1 April and 1 October. We propose to announce each updated cap level around two months before it comes into force. The first and last cap periods will be shorter, as shown in **Table 9**.

3.5. We consider that six monthly updates in April and October provide the best balance in terms of allowing changes in suppliers' costs to be passed through without undue delay (reducing risk to suppliers), while avoiding a significant increase in the number of price changes that consumers have seen historically.[9]

Table 9: Timing of each cap period

Cap period	Cap level in force	Level announced
First cap period	Inception to 31 March 2019	Final decision
Summer cap period	1 April to 30 September	February
Winter cap period	1 October to 31 March	August
Last cap period	1 October to 31 December	August

Source: Ofgem

3.6. In our May consultation we proposed updating the cap every six months, but we sought stakeholders' views on updating the cap more frequently. We also sought views on updating some cost components – particularly wholesale costs – less frequently.

3.7. Stakeholders were in favour of updating the cap every six months, with very few suggesting more frequent updates. Stakeholders felt that customers favoured price stability, as it provides certainty and helps with budgeting.

3.8. Specifically regarding wholesale costs, the majority of suppliers favoured passing through changes in wholesale costs every six months. Few suppliers supported more frequent changes as these might be confusing for customers, and increase the burden and costs of more frequent notifications.

3.9. Some suppliers supported less frequent updates to wholesale costs. This approach risks larger and less frequent changes to customer prices. It also significantly increases suppliers' volume risk when purchasing energy, which we have sought to avoid in the design of the proposed cap. We discuss this issue in Appendix 4 – wholesale costs.

3.10. We propose to update the cap in April and October because these six month periods allow the cap to track changes in efficient costs over time more accurately than alternative periods. They align most consistently with seasonal wholesale contracts for

[9] On average, the large suppliers have updated their SVT prices between once and twice a year since market liberalisation, although the frequency varies between suppliers.

gas and electricity, network charging years, and the obligation periods of a number of environmental and social obligations.

Our proposed approach to making routine updates

3.11. We propose to update each cost component of the cap separately. This recognises that the cost drivers for each component differ from another, so they might change at different rates over time. We would update the gas and electricity caps separately, but use the same approach for each.

3.12. We propose to update cost components using a set of cost drivers outside suppliers' control – linked to third party data and/or a pre-specified allowance for certain cost items. An approach of this type is used under the existing safeguard tariffs, which we update with reference to changes in wholesale forward prices, forecasts of policy costs and inflation.

3.13. The exception to this proposed approach – of using external data – is in relation to the costs associated with the smart meter rollout, where we propose to partly draw on supplier data. Given the uncertainty surrounding some of the costs of rollout, we will review estimates in time for the third cap period, which would start on 1 October 2019.

3.14. **Table 10 (overleaf)** sets out how we propose to update each cost component. The table illustrates the impact of updating each cost component between 2017 and January 2019. The table uses a direct debit single rate dual fuel bill, with a national average network charge.[10]

3.15. In our May consultation we presented three potential options for updating the cap. To different extents they rely on price data or cost data:

- A basket of market tariffs (price data)
- A periodic review of information on realised costs (cost data)
- Update reflecting trends in cost data and indices (costs data).

3.16. Stakeholders broadly agreed with our proposal to update the cap based on cost drivers outside of suppliers' control.

3.17. Respondents agreed that a basket of market tariffs could mean that the cap was updated in ways that were not related to changes in efficient costs. The cap would be likely to reflect trends in the nature of price competition in the market, rather than just movements in costs. For instance, suppliers sometimes offer loss-making tariffs to grow their market share. Stakeholders agreed with our concern that the introduction of the cap could affect the prices offered in competitive section of the market, distorting future updates of the cap. For instance, suppliers could increase fixed tariff prices to offset capped default tariffs, which could then increase the level of the cap.

[10] Ofgem, *Annex 3 – Network cost allowance methodology elec,* and Ofgem, *Annex 3 – Network cost allowance methodology gas*

Table 10: Cost data and indices used to update each cost component, and illustrative impact on a single rate dual fuel direct debit bill between the 2017 baseline and January 2019.

Cost component	Baseline	Proposed approach	Updated cap 2019	Change
Wholesale	£367	**Calculated.** Direct fuel cost allowance for forthcoming period calculated, based on forward energy contracts. Additional allowances applied as a fixed percentage of that allowance. Capacity Market costs calculated using latest data on scheme costs and the demand base across which costs are recovered	£444	+21%
Network charges	£258	**Calculated.** Allowance for each period calculated directly using network charging statements	£258	+0%
Policy costs	£117	**Calculated.** Updated using a combination of scheme data, OBR forecasts, and information on the expected demand base across which costs are recovered.	£137	+18%
Operating costs	£169	**Indexed.** Operating cost component in 2017 baseline, indexed with to reference to CPIH. **Calculated.** Increase in smart costs charges and net impact of rollout since baseline period added to allowance.	£189	+12%
Payment uplift	£21	**Calculated.** Bad debt and working capital related costs set as fixed % of total bill (excluding headroom), **Indexed.** Administrative costs indexed with reference to CPIH	£23	+8%
EBIT	£18	**Calculated.** Profit as fixed percentage 1.9%.	£20	+13%
Headroom	£10	**Calculated**. Set as fixed % of costs (excluding network costs)	£12	+18%
VAT	£48		£54	+13%
Total	**£1,007**		**£1,136**	**+13%**

Source: Ofgem

Notes: "CPIH" refers to the Consumer Price Index including owner-occupiers' housing costs. "OBR" refers to the Office of Budget Responsibility.

3.18. Some stakeholders supported a periodic review of suppliers' realised costs, but the majority did not. This approach would mean that we updated the cap based on historical information, which could be up to 24 months out of date by time the cap they influence is in place. This would introduce a significant lag in how well the cap reflects changes in efficient costs. The process would also be much more burdensome and costly for suppliers, which would increase customers' bills. Most importantly, tying the cap directly to trends in reported costs would risk reducing the incentive for efficient suppliers to cut their costs.

Updating the default tariff cap for changes in the cost of smart meters

3.19. We propose to use a different approach for updating smart costs, in order to recognise the additional uncertainty around how these costs will develop over time.

3.20. In our operating cost baseline, we do not propose to separate out the net cost of smart meters from other operating costs (other than direct industry charges). This is because smart meters are, or will become, an intrinsic and integrated part of suppliers' operations during the lifetime of the cap.

3.21. However, suppliers are still rolling out smart meters, so we would not expect these costs to develop in line with inflation (which is how we update other operating costs). Over the long run, smart meters should reduce suppliers' costs and deliver much wider benefits for consumers by allowing them to control and reduce their energy usage. Smart meters are also a key enabler for a future, more flexible and efficient energy system. But during the temporary period of the cap, smart meters are likely to increase suppliers' costs as meters are rolled out.[11] We will update the cap to account for net changes in the cost of smart metering since 2017 (the baseline period).

3.22. We propose to update smart costs in two components. For industry charges we propose to use the latest charging statements and budgets. For changes relating to the rollout of smart meters we propose an increment to operating costs to reflect the increase in net smart costs smart since our 2017 baseline. The impact of smart meters is based on the current BEIS Cost Benefit Analysis (CBA) model. It also includes a number of modifications we have made to remove cost and benefit categories that are not relevant to suppliers, as well as using more recent information from suppliers to better reflect the incremental net cost of smart metering.

3.23. We propose to use this approach in the first two cap periods. In response to feedback to our May consultation, we propose to conduct a review of the smart metering rollout profile, costs and benefits before updating the cap from October 2019 onwards. This review will address the uncertainty surrounding the future profile of smart costs, ensuring that the cap reflects the underlying costs of smart meters accurately. The review also enables us allow for smart costs in a way that protects customers.

3.24. Suppliers are required to take all reasonable steps to install smart meters in every domestic (and small business) premises by end 2020. Smart meters are one of the

[11] The cost benefit analysis for smart costs includes all benefits and costs to suppliers and customers, which over the lifetime of smart meters provides a positive impact. For the cap, we are only interested in the impact of rollout that affects suppliers' costs in any given six month cap period. Sometimes this will be a net cost, even if the wider benefits to customers are positive.

many transformational programmes that should help customers engage in the market, and allow the cap to be lifted.

3.25. If we take a stringent view on the efficient cost of rolling out smart meters, we could unintentionally hold back roll out, harming customers in the longer run. However, if we take a lenient view on smart costs we could overstate the cap, failing to protect customers in the near term, as their prices would be higher than they need be. This review will allow us to ensure we maintain the right balance for consumers.

3.26. In response to stakeholders' consultation responses, we are providing a disclosure room which will contain the smart costs model, and a license condition template which includes the pass-through charge calculations, alongside this consultation. This should help suppliers understand our approach. For further detail on our approach, rationale, and stakeholders' views, see Appendix 7 - Smart metering costs.

Considering unforeseen trends in efficient costs

Correcting systematic or forecast errors

3.27. We need to be sure that the default tariff cap tracks changes in underlying costs accurately.

3.28. If we materially overestimated efficient costs for the purposes of setting the cap (ie. the cap were too high), then this could mean that SVT customers do not receive the protection intended under the Act, and thereby pay higher prices. While some suppliers may price their default tariffs beneath the cap, our experience with the existing safeguard tariffs suggests it is likely that most would price their default tariffs to the cap.

3.29. If we materially underestimated efficient costs (ie. the cap were too low), then efficient suppliers may not be able to finance their activities, which in turn may also have negative consequences for SVT customers.

3.30. In this section we consider how we might adjust the default tariff cap, if we discovered significant differences between efficient costs and those included in the cap. These could arise due to:

- **Limitations of our cap design.** Efficient costs cannot be directly observed, and we must make simplifications and assumptions when estimating the costs an efficient supplier incurs in supplying different types of customers. This creates the possibility that there may be systematic features of the methodology we use which cause the cap to be too high or too low.

- **Outturn costs departing from forecasts.** We propose to set the level of the cap in **advance** to reflect our expectation of costs in each price control period, to avoid distorting competition in the wider market. However, in some cases, there will be uncertainty about elements of suppliers' costs for the coming price cap period at the point in time when the level of the cap is set. This means that even if our cap design accurately reflects expected costs, outturn costs may nevertheless depart from this forecast level.

3.31. We consider that a six monthly review of the level of the cap, should in general be sufficient to allow cost trends to feed through to the level of the cap, and avoid undue risk for suppliers. Suppliers already take on risk when setting their prices. Suppliers have rarely changed SVTs more than twice in a year in the period since liberalisation.

3.32. If we consider there are material systematic issues that require correction, we might modify the licence. The Act includes specific provision for us to make supplemental modifications to the licence condition. This would allow us to make any changes required to correct how the cap was updated, if it systematically and materially departed from an efficient level of costs. For example, we might consider making a modification were there a fundamental (and unanticipated) change to the environmental and social obligations that suppliers face, which had a material impact on their cost base.

3.33. Having considered responses about the length of time required to make modifications to the licence conditions, we also propose to include a provision within the licence conditions to allow us to, subject to consultation, make changes to the models used to update the wholesale, policy, networks and smart metering net cost components of the cap. This will provide us some additional flexibility to carry out any urgent changes to the way that trends in the key categories of exogenous costs are passed through to suppliers if required.

3.34. We do not propose to have a specific review of the cap level or methodology. The type of specific systematic errors for which we would adjust the cap would need to be unforeseen, clear, material, and necessitate changes. Many of the issues relating to efficient costs are judgmental and uncertain. A scheduled review of these types of issues would undermine suppliers' incentives to improve their efficiency. This would reduce protection for customers, thereby undermining the purpose of the cap.

3.35. We do not propose including a mechanism in the cap for correcting previous forecast errors – whether or not they benefit suppliers. In our policy consultation we stated that we were concerned that an adjustment mechanism to correct for error in forecasts in the previous period would create a further distortion to the market. As suppliers' customer bases and costs change this could make it harder for efficient suppliers to sufficiently recover their costs. We note that in the long run, non-systematic forecast error should net out. Suppliers already manage the short term forecast risks, and even with SVTs, rarely adjust their prices more than twice a year. We do however, consider the short term volatility when setting headroom.

3.36. Please see Appendix 3 - updating the cap methodology, where we set out our approach, stakeholders' views, and our rationale in further detail.

Assessing whether to extend the default tariff cap

Conditions for effective competition

3.37. The default tariff cap is a temporary measure and is not intended to replace competition in the market. It is intended to protect disengaged consumers until the right market framework is in place for competition to be effective for these consumers. The Act requires us to carry out a review of whether the conditions for effective competition are in place for a post-price cap market.

3.38. We are required to publish this review on or before 31st August 2020 which must include a recommendation on whether the cap should be extended or not. The Secretary of State would then make a decision as to whether to extend the cap or not. If the cap is extended, we would carry out a further review in 2021 and if required in 2022. If the cap is extended after each of these reviews, it will cease to have effect at the end of 2023.

3.39. In our May consultation we set out what we might consider when assessing whether conditions are in place for effective competition in the domestic energy market. We received stakeholder responses regarding conditions for competition and are continuing to review these. We will continue to develop our approach and will engage with stakeholders again in 2019.

3.40. We intend to develop a framework that sets out how we will evaluate the prospect of effective competition in the market after the default tariff cap is removed, which will form the basis of our recommendation to the Secretary of State. We aim to develop a framework that is based on a broad set of market indicators that allows for a wide view of the market, being both evidence based and transparent. As stated in the policy consultation, directly assessing market outcomes while the cap is in place is unlikely to tell us what would happen to competition when the cap is removed. We must therefore not set outcome based criteria with specific thresholds, but rather take a higher level view of the market structure by assessing the wider market developments and the trends in competition.

4. Potential impact of the default tariff cap

In this chapter we consider our analysis of the impact our proposed default tariff cap level would have had in 2017, had it been in place.

Analysing the potential impact of the cap

4.1. We have assessed the potential impact of the default tariff cap against the requirements in the Act, namely the objective to protect SVT customers and the other matters to which we must have regard (as set out in section 1(6) of the Act).

4.2. To do this, we considered a wide range of information, including submissions to our working papers and our consultation. Ultimately, the Act requires Ofgem to make a judgement-based decision on the cap, taking into account the relevant requirements.

4.3. One of the analyses we used to help us assess the impact of any proposed cap level was a hypothetical scenario-based modelling analysis. This analysis looked at possible impacts of a cap, as they would have been in 2017, had it been in place.[12] Its results illustrate the potential impacts that different cap levels would have had. They are not predictions. We propose to set the cap using our cost benchmark methodology (as described in Chapter 2), but these hypothetical scenarios (as well as other supporting evidence and qualitative consideration) inform our understanding of the assumptions and conclusions in that methodology.

4.4. We modelled three different types of cap: the frontier (based on the lowest cost suppliers in the market), our proposed cap level (around £35 higher than the frontier), and a higher cap (£70 higher than the frontier). Please see the Appendix 11 – draft impact assessment for further details on their illustrative results.

4.5. In this chapter we consider what impact our proposed cap level would have had in 2017, had it been in place. In turn, we consider the implications of the cap in relation to the consumer protection objective of the Act, and each of the matters to which we must have regard as set out in section 1(6).

Protecting customers

4.6. In response to our May consultation, most stakeholders recognised that – in line with the Act – protection of current and future default customers should be our primary concern when considering the impact of the default tariff cap.

4.7. We expect the cap to provide a high level of protection – ensuring SVTs reflect the costs of supplying energy more closely than they have done in recent years.

[12] 2017 is the latest year for which we have full data on prices and costs.

4.8. The level of protection afforded to customers is demonstrated through the following estimates. In 2017:

- 96% of SVT customers would have paid less under our proposed cap
- In total, SVT customers would have paid £1.3 billion less than they were charged in that year
- An average single rate dual fuel direct debit customer with typical consumption would have paid £94 less (ranging between £61 and £157 for the six largest suppliers)
- An average single rate dual fuel standard credit customer wit typical consumption would have paid £89 less (ranging between £44 and £175 for the six largest suppliers) and
- On average, single fuel customers with typical consumption (ie those who have different gas and electricity suppliers) would have saved £79 on their gas bill and £39 on their electricity bill.

Wider types of protection

4.9. Some stakeholders emphasised that protection was a wider concept than just maximising current savings to customers. Some stakeholders were concerned that a cap could discourage people from engaging with the market, and increase the proportion of people on SVTs in the long run. We propose to mitigate this concern by ensuring that customers on SVTs are protected from overcharging. We also consider that there will continue to be incentives for engaged customers to switch to cheaper fixed tariffs, even with the proposed cap in place. In any case, the cap will be temporary, and we expect that any reduction in engagement during the life of the cap would reverse when the cap is lifted.

4.10. In addition, Ofgem has a range of work underway to transform the nature of the current energy market which should help introduce conditions for effective competition; for instance, the faster switching programme and trials for prompts to engage. This work supports innovation and new products and services and helps customers to engage in the market. As such we do not agree that the cap presents a long-term risk to consumers.

4.11. Some stakeholders were also concerned that a cap could harm customers, as suppliers might reduce service quality when they attempt to reduce their operating costs. We expect suppliers to maintain service quality, ensuring they meet their obligations. The supply licence makes clear suppliers' obligations to treat their customers fairly and in particular to devote special attention to those in vulnerable circumstances who may need additional help or services.

4.12. We do not consider the cap level requires suppliers to reduce service quality for customers. Ofgem will closely monitor the level of service which suppliers deliver to their customers and stands ready to take compliance and enforcement action in the event that any licence requirements are not met. Furthermore, we have not seen any evidence to suggest that better customer service is in fact related to higher costs. In some cases, the opposite could be the case, where poor service leads to higher costs as issues are not resolved in a timely manner.

Other matters for regard

4.13. Based on our analysis of suppliers' costs and prices, and modelling of the impact of different cap levels would have had in 2017, had the default tariff cap been in place, we make the following judgements regarding the various needs to which section 1(6) of the Act requires us to have regard:

- **Improving efficiency.** The CMA, in their investigation, concluded that large suppliers were inefficient, with higher costs than they would expect if competition was more effective. Our proposed cap level creates strong incentives for suppliers to reduce their costs. In setting our proposed benchmark, we do not expect a typical efficient supplier to match the operating costs per customer of the lowest cost suppliers (the frontier). The frontier companies have atypical customer bases that reduce their costs. However, our proposed benchmark does encourage suppliers to reduce their costs from 2017 levels; reflected in the proposed setting of the operating costs allowance in the efficient benchmark at £5 per dual fuel customer below the lower quartile supplier in our sample in 2017. In that year, the cap would have reduced suppliers' revenue by 4.6% (£1.3 billon). Even if suppliers were to increase their fixed tariff prices, to recover some of their revenues, there would still be very strong incentives to identify efficiencies and reduce their operating costs per customer.

- **Incentives for customers to switch.** Our proposed cap level maintains incentives to switch. In 2017, the cheapest fixed tariff in the market would still have been around £150 lower than the SVT cap, providing strong incentives to switch. We consider that fewer large suppliers would have offered low fixed tariffs, as without SVTs priced above the cap to offset fixed tariffs, they might have had to increase fixed tariff prices to avoid losses. We expect that under a cap, switching levels would have been lower, by up to 50%. There is some evidence that customers were less likely to switch to small or medium-sized suppliers, preferring more recognisable suppliers – although recent trends suggest more customers now switch to smaller suppliers. We would expect switching to grow again once the cap is removed, as transformation in the market will have made conditions for competition more effective.

- **Enabling suppliers to compete.** Our proposed cap level ensures there is sufficient market participation for suppliers to compete for contracts and it enables a range of suppliers to compete. Notwithstanding the fact that certain – relatively inefficient – suppliers may face more challenges once SVT prices reduce, our analysis shows that in 2017, a range of different sized suppliers would have been profitable and able to compete. We do not consider it would be consistent with the Act's objective to set a higher cap level for the purposes of enabling every supplier – even those who may be relatively inefficient – to compete. At the level of the cap we propose, we would not anticipate a large number of inefficient suppliers rapidly exiting the market in a manner disruptive to customers; although we recognise they may find it harder to compete than other more efficient suppliers. Overall we expect new entrants to still be incentivised to enter the market.

- **Enable suppliers to finance their activities.** The cap is above the efficient frontier (ie. the operator with the lowest reported costs per customer), so efficient suppliers will be able to finance the cost of default tariffs. We include, within our proposed benchmark and in 'headroom', allowances for suppliers to manage uncertain and volatile costs. We also propose to provide an allowance in our benchmark to recognise that the efficient cost level will vary as some suppliers have customer bases that expose them to higher costs.

4.14. Please see Appendix 2 - Cap level analysis and headroom for a fuller discussion of stakeholders' views and how we analysed the potential impact of the proposed cap level.

5. Scope of the default tariff cap

Whether the default tariff cap applies to a customer, or how it applies, will differ depending on some customers' circumstances. In this chapter we explain how the proposed cap will affect different groups.

5.1. In this chapter we explain how the proposed cap affects:

- customers that receive protection for other tariff caps by virtue of being deemed to be vulnerable due to their financial or other circumstances
- customers that have chosen tariffs that appear to provide additional support for renewable energy
- prepayment meter customers receiving protection from the prepayment safeguard tariff
- customers with a SMETS2 meter in prepayment mode that are not protected by the safeguard tariff
- customers with default fixed tariffs
- customers with multi-register meters.

Protection for vulnerable customers

Current protection for some vulnerable customers

5.2. Customers on SVTs and default tariffs receiving the Warm Home Discount (WHD) are currently protected by the existing safeguard tariff. We introduced this protection in 2018 as a temporary measure, which would be replaced by the government's temporary price cap for customers on Standard Variable and default tariffs or by a wider vulnerable safeguard tariff.[13]

5.3. The Act allows customers that receive protection from other tariff caps by virtue of being deemed to be vulnerable due to their financial or other circumstances to be exempted from the default tariff cap. However, since our intention when introducing the WHD protection was to move these customers onto the default tariff cap when it was introduced, we do not propose to use this exemption.

5.4. In our May consultation we did not specifically seek stakeholders' views on how WHD recipients would be protected once the default tariff cap was in place.

[13] (Ofgem 2017) Decision to extend PPM cap: https://www.ofgem.gov.uk/system/files/docs/2017/12/decision_letter_whd_safeguard_tariff_-_final.pdf P. 2.

5.5. In response to that consultation stakeholders sought clarity on this situation, with some concerned that customers protected by the existing safeguard tariff might see a step change in their bills when we introduced the default tariff cap.

5.6. We agree that these customers should not experience a step change in their bill. As such, we propose to protect all customers currently receiving Warm Home Discount and on the existing safeguard tariff, by capping their prices in line with the default cap for direct debit customers (rather than the existing safeguard tariff). By taking this approach we ensure that, on average, WHD customers paying by standard credit will not see an appreciable rise in their bills, or reduction in the protection they receive (see **Table 11**).

Table 11: Comparison of (expected) default cap and existing safeguard tariff

Cap	January to March 2019
Default tariff cap – standard credit	£1219
Default tariff cap – direct debit	£1136
Existing safeguard tariff	£1136
Difference between existing safeguard, and direct debit default tariff cap	**£0**

Source: Ofgem

Tariffs supporting renewable energy

Potential exemption

5.7. The Act allows for the cap not to apply to SVTs that have been chosen by the customer and that appear to the Authority (Ofgem) to support the production of renewable gas or electricity.

5.8. The Act required us to consult on whether such a renewable tariff exemption is necessary, and if so, how to exempt the respective tariffs.

Derogation for tariffs supporting renewable generation

5.9. We propose that the default tariff cap automatically applies to all SVTs but to allow suppliers to apply for a derogation for tariffs that provide additional support to renewable energy (that have been chosen by the suppliers' customer). To receive a derogation, a supplier would need to demonstrate that its tariff:

- provides support for renewables, materially beyond support provided through subsidies, obligations or other mandatory mechanisms and
- involves materially higher costs due to the renewable element of the tariff.

5.10. The Act requires that, to receive an exemption from the cap, the renewable tariff must be chosen by the customer. As a result, all suppliers will have to offer a separate default tariff to customers that is compliant with the default tariff cap.

5.11. The supplier must also be able to provide clearly defined and robust evidence that it has met the derogation criteria, and that this evidence is able to be monitored on an ongoing basis.

5.12. We propose a derogation, rather than an exemption, to ensure that the mechanism is not easily gamed. Otherwise there is a risk that a supplier could label a tariff as 'green' but not actually incur greater costs, nor provide additional support to renewable beyond that already required.

Stakeholders' views

5.13. Stakeholders responded to our consultation broadly expressing support for our approach. They shared our concerns that suppliers should not be allowed to game the cap by using this exemption, and that a derogation would be an appropriate way to ensure suppliers could still offer tariffs that provide genuine support.

5.14. However, stakeholders were keen to understand how the derogation would work in practice. We provide full details of our approach, considerations, and stakeholders' views in Appendix 10 – Exemptions.

Customers with prepayment meters

Protection under the safeguard tariff

5.15. The Act exempts customers who already receive protection from the prepayment meter cap. That safeguard applies to all customers with a conventional, or SMETS1 meter in prepayment mode.

SMETS2 meters

5.16. Customers with SMETS2 meters do not receive protection from the prepayment safeguard tariff. Where they are on SVTs or default tariffs, they will be protected by the default tariff cap.

5.17. We do not propose to have a separate cap within the default tariff cap for customers with a SMETS2 meter in prepayment mode. There are very few SMETS2 smart meters rolled out to consumers, so we do not yet have reliable data on the actual costs of SMETS2 meters in prepayment mode. As such we are not able to make a reliable estimate of the separate cap level that would be appropriate. However, this is an area that we will keep under review.

5.18. We propose to apply the direct debit cap to default tariff customers with SMETS2 prepayment meters. In response to our May consultation one supplier suggested that the cost to serve for a customer with a smart meter in prepayment mode was higher the costs to serve of a direct debit customer. We consider this plausible as there may be additional administrative costs, although there are not additional metering equipment costs as there are with traditional meters. But we expect cost to be lower

than standard credit, as there are no additional working capital costs, and no new bad debt is incurred.

5.19. We consider the direct debit cap to be a useful interim solution until better data is available. This is because the direct debit cap includes a payment method uplift to recover the additional costs of standard credit. When calculating that uplift, we only analysed direct debit and standard credit accounts. We did not include prepayment accounts. Therefore the costs of standard credit are fully recovered from the uplifts, before prepayment customers are considered. If suppliers do incur additional costs for customer with a SMETS2 meter in prepayment mode, then the uplift can act as a cushion, because it is not required to cover standard credit costs.

Customers on fixed default tariffs

The default tariff cap applies to all customers on SVTs or default fixed tariffs.

5.20. In response to our May consultation, some stakeholders sought clarity on how default fixed tariffs would be affected if the cap level increased away from an existing fixed tariff, or decreased to a level below it.

5.21. The Act requires that suppliers' default fixed tariffs are set below the level of the cap. Therefore suppliers will be required to make reductions to their default fixed tariff prices in the event that we reduce the level of the cap below the level of those fixed tariffs. For example, a supplier that set the unit rate or standing charge of a default fixed term tariff in January at a level equal to the maximum allowed under the cap would be required to reduce those charges in the event that the level of the cap fell when it was updated in April. Note that such reductions would be required even if the level of the cap were only changed once a year, with the exception of default tariffs with six month terms that exactly matched the period of the cap.

5.22. At the same time, standard licence condition 22C.9 means that a supplier would not be able to increase the price of a fixed default tariff in the event that the level of the cap increased. For example, a supplier that set the unit rate or standing charge of a default fixed term tariff in January at a level equal to the maximum allowed under the cap would not be able to increase those charges in the event that costs rose and the level of the cap was increased in April. This creates an asymmetric risk for suppliers offering default fixed tariffs.

5.23. We note, however, that suppliers may choose to avoid this risk by linking the price of a default fixed tariff to the price cap (as provided for under 22C.11(a)(i)). In doing so, suppliers are required to make clear the way in which the prices of the tariff would vary over time in their communications with their customers.

Multi-register electricity meters

5.24. Some SVT customers pay for their electricity using more than one rate. For instance, Economy 7 customers pay less for the electricity they use at night. There are a wide array of multi-register tariffs, and these may increase as time-of-use tariffs become more common in the coming years.

5.25. For the most part, we propose to set the efficient benchmark for multi-register tariffs in the same way described in Chapter 2.

5.26. The principal difference is that for multi-register tariffs, we propose to base the cap on assumed consumption splits, in line with the existing safeguard tariffs (ie. estimates of the proportion of the consumption of customers with different meter types that will take place in peak and off peak periods).

5.27. For Economy 7, the split is the same for all suppliers and all regions. We update this assumed split periodically.

5.28. For other restricted meter tariffs, we require suppliers to propose a split to us based on historic consumption patterns of customers on each tariff, prior to the start of each price cap period.

5.29. Note that on a per MWh basis, Economy 7 customers pay less than single rate electricity customers. However, Economy 7 customers consume more energy than single rate electricity customers, which means that we state a higher Economy 7 bill at their typical consumption than we do for single rate electricity customers (stated at their lower typical consumption level).

6. Next steps

In this chapter we explain the next stages of the process for introducing the default tariff cap, and in particular, details on our arrangements for providing greater transparency, to assist with this consultation.

Timetable

Consultation

6.1. This consultation on our methodology, and the statutory consultation on the related licence conditions, runs from **6 September 2018 to 8 October 2018**.

6.2. We are inviting views on our proposals and methodology, draft impact assessment, proposed licence modifications (including annexed models), and draft notice of baseline values and the initial value of the CPIH index.

6.3. The appendices to this consultation overview are provided to help stakeholders provide comments on each aspects of our methodology.

Decision and implementation

6.4. We intend to publish our decision along with the final versions of the impact assessment, licence modifications and notice of baseline values and the initial value of the CPIH index in November. This would enable us to have the default tariff cap in force at the end of the year.

Transparency

6.5. We are committed to an open and transparent process for the design and implementation of the default tariff cap.

Published models

6.6. In addition to the annexes to the licence conditions which demonstrate how the default tariff cap will be updated over time. We have published the following supplementary models alongside the statutory consultation:

- **Supplementary model – default tariff cap level** which illustrates how the overall level of the cap is calculated
- **Supplementary model – cap level analysis** which illustrates how we assess the effect of the cap on customer bills, price dispersion and supplier profitability
- **Supplementary model – payment method uplift** which illustrates how the direct debit and standard credit uplift is calculated

6.7. All commercial and/or sensitive input information has been removed from these models to enable publication.

Disclosure of supplier specific data

6.8. Shortly after the publication of the statutory consultation, we will share data with relevant parties pertaining to aspects of our methodology so that they can verify and understand adjustments we have made to the data they provided.

6.9. For each of the suppliers in our operating cost benchmark sample (including those we excluded) – which we analysed to inform the efficient benchmark – we will disclose their data and the adjustments made in analysing their operating costs per account. These disclosures will be direct to the relevant suppliers for comment. Please see the details of our benchmarking approach and outcomes described in **Appendix 6 – Operating Costs**.

6.10. So that suppliers can verify and understand the adjustment we made to tariff data in order to set the cap at nil consumption, we will disclose the relevant price data and adjustments to each supplier in our sample, so that they can understand and verify the approach – see **Appendix 1 – Benchmark methodology** for details.

Disclosure room

6.11. In our open letter[14] published 29 August 2018, we set our approach to providing a disclosure room – in operation 17 September 2018 to 3 October 2018.

6.12. The disclosure room will include the information and underlying data for the smart metering costs model and the wholesale allowance models.

6.13. Given the sensitive nature of this data, the disclosure room will be accessible to a limited number of approved external legal and/or economic advisors.

6.14. Further information on the arrangements for the disclosure room will be set out in the legal undertakings that all parties intending to take part in the disclosure room will be required to sign.

[14] https://www.ofgem.gov.uk/system/files/docs/2018/08/notice_of_intention_to_hold_disclosure_room_final.pdf

7. Privacy notice on consultations

Personal data
The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer
The Gas and Electricity Markets Authority is the controller, (for ease of reference, "Ofgem"). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data
Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data
As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

3. With whom we will be sharing your personal data
We are not intending to share your personal data with other organisations. We are intending to publish non-confidential consultation responses, including any personal data that may be contained within them.

4. For how long we will keep your personal data, or criteria used to determine the retention period.
Your personal data will be held until the implementation of the default tariff cap.

5. Your rights
The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services
- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at https://ico.org.uk/, or telephone 0303 123 1113.

6. Your personal data will not be sent overseas (Note that this cannot be claimed if using Survey Monkey for the consultation as their servers are in the US. In that case use "the Data you provide directly will be stored by Survey Monkey on their servers in the United States. We have taken all necessary precautions to ensure that your rights in term of data protection will not be compromised by this".

7. Your personal data will not be used for any automated decision making.

8. Your personal data will be stored in a secure government IT system. (If using a third party system such as Survey Monkey to gather the data, you will need to state clearly at which point the data will be moved from there to our internal systems.)

9. More information For more information on how Ofgem processes your data, click on the link to our "Ofgem privacy promise".