Decision

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Price Cap – February 2022 decision on credit and PPM SMNCC allowances

Subject	Details
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This document sets out our decisions for updating the smart metering allowances (the Smart Metering Net Cost Change or SMNCC allowances) for credit meters and prepayment meters (PPM) in the default tariff cap in time for summer 2022.

We have carefully considered all responses to our consultation. We have published non-confidential responses alongside this decision.

Contents

Executive summary

The default tariff cap ('cap') protects domestic customers on default tariffs. We conduct annual reviews of the Smart Metering Net Cost Change (SMNCC) allowances in the cap for credit meters and prepayment meters (PPM). These allowances reflect the change in smart metering costs since 2017. We update all future values of the cap when we conclude an annual review (except when we adopt a contingency allowance). These are the final SMNCC allowances for the next year. The SMNCC allowances for the cap periods beyond this are subject to revision through subsequent annual reviews.

We decided in August 2021 to adopt contingency allowances for cap period seven (October 2021 to March 2022), due to the Department for Business, Energy and Industrial Strategy's change to the start date of its new smart meter rollout framework. In October 2021, we published our final consultation for the 2021 Annual Review covering cap period eight and beyond. This document sets out our decisions following consideration of stakeholder representations.

Unchanged positions from August 2021 decisions

In line with our October 2021 consultation proposal, we consider that most of our August 2021 decisions for cap period seven remain appropriate for cap period eight and beyond, and we have decided to retain them.

Changes following October 2021 consultation

After considering stakeholder feedback, we have made a small number of changes to positions from the August 2021 decisions that we had proposed to maintain.

We have decided to increase the PPM asset life to 15 years for electricity and 12 years for gas (from 12 and 10 years respectively). This is the result of a refined calculation approach. We have decided to increase the age until which suppliers pay premature replacement charges (PRCs), when they remove meters early, to 14 years for traditional electricity PPM and 12 years for traditional gas PPM (from 10 years for both). This is also the result of refinements to our calculations. As a consequence of our changes to the PRC age and the meter asset life, we have also decided to increase the period over which suppliers pay for meter asset and installation costs (the amortisation period) for PPM.

Advanced payments reflect when suppliers have received payment in advance for smart metering costs they have not yet incurred. We have decided to make minor changes to our

calculation of advanced payments, in light of recent market developments. First, we have decided to use the latest customer numbers (from October 2021), to provide a better reflection of the number of default tariff customers in cap period seven. Second, we have decided to exclude the customer numbers for suppliers who have exited the market through the supplier of last resort (SoLR) process, in order to exclude the impact of any advanced payments they may have received.

New proposals since August 2021 decisions

We had consulted on two positions going beyond the August 2021 decisions, to correct for overestimation of traditional PPM installations. We have decided to implement our proposal in each case.

First, we have decided to apply a parameter to correct for the SMNCC model's overestimation of traditional PPM installations in 2020. This overestimation resulted from 2020 meter installations being lower than usual due to COVID-19.

Second, we have decided to adjust formulae to correct for the SMNCC model's overestimation of traditional PPM installations in 2022 and 2023. This overestimation was due to the model assuming that traditional PPM installed from 2012 onwards are always replaced by traditional PPM when they expire, rather than generally by smart meters.

SMNCC values

For cap period eight, we proposed to set the credit SMNCC at £8.79 per typical dual fuel customer and the PPM SMNCC at -£10.46 per typical dual fuel customer (post-offset). In light of the decisions above, we have decided to set the credit SMNCC at £8.02 per typical dual fuel customer and the PPM SMNCC at -£7.47 per typical dual fuel customer (post-offset). [Appendices 1 and 2] show the values we will use when calculating the cap for individual fuels, as well as the values for subsequent cap periods.

Next steps

This decision will take effect from cap period eight, which begins on 1 April 2022.

In parallel with our October 2021 consultation, we also published a working paper on our next annual review of SMNCC allowances. We intend to publish a final consultation for our 2022 Annual Review in late spring 2022.

1. Introduction

Subject of this decision

1.1. The default tariff cap ('cap') protects domestic customers on standard variable and default tariffs (which we refer to collectively as 'default tariffs'), ensuring that they pay a fair price for their energy, reflecting its underlying costs. The cap is one of the key activities which fall within the outcome "consumers pay a fair price for energy and benefit from rights and protections" within our Forward Work Programme for 2021-22.[1,2] We set the cap by considering the different costs suppliers face. The cap is made up of a number of allowances which reflect these different costs.

1.2. One cost to suppliers is the net cost of installing and operating smart meters. We reflect this in the cap through two allowances. The operating cost allowance includes the cost of smart metering in the 2017 baseline year (alongside other operating costs). The Smart Metering Net Cost Change (SMNCC) allowance reflects the change in smart metering costs since 2017.

1.3. The SMNCC allowance comprises a 'pass-through' element covering industry charges relating to smart metering and a 'non-pass-through' element covering suppliers' smart metering costs.

- We update the pass-through element as part of the six-monthly cap updates. This element is not the focus of this decision.

- We use a forward-looking modelled approach to set the non-pass-through element for future cap periods**. This decision focuses on the non-pass-through SMNCC allowances** (which we refer to as 'the SMNCC' for the remainder of this document).

1.4. Changes to the SMNCC affect the amount that suppliers can charge their default tariff customers under the cap, and therefore are highly likely to affect the amount these

[1] Ofgem (2021), Forward work programme 2021/22
https://www.ofgem.gov.uk/publications/forward-work-programme-202122
[2] We are currently consulting on our draft Forward Work Programme for 2022-23.
Ofgem (2022), 2022/23 Forward Work Programme Consultation.
https://www.ofgem.gov.uk/publications/202223-forward-work-programme-consultation

customers pay through their energy bills. However, the cap level changes every six months as costs change. The value of the SMNCC contributes to the level of the cap, but other cost changes (especially to wholesale costs) are significantly larger than changes to the SMNCC and have a greater impact on the cap level.

Scope of this decision and our decision-making process

Annual reviews

1.5. We set the SMNCC allowances in the cap for the duration of the cap.

1.6. We review the SMNCC annually and update all future values of the cap when we conclude an annual review.[3,4] These are the final SMNCC allowances for the next year. The SMNCC allowances for the remaining cap periods beyond this are subject to revision through subsequent annual reviews.

1.7. Table 1.1 below provides a simplified illustration of this annual review process.

[3] When we are unable to conclude our annual review and have to set a contingency allowance, we only update the SMNCC for the next cap period.
[4] We normally announce the conclusions of our review ahead of our August cap announcement.

Table 1.1: Simplified illustration of annual review process

<table>
<tr><th></th><th>Annual review Y</th><th>Annual review Y+1</th><th>Annual review Y+2</th></tr>
<tr><td>Cap period X</td><td rowspan="2">Annual review sets final SMNCC for these cap periods</td><td rowspan="2">N/A (historical cap period)</td><td rowspan="4">N/A (historical cap period)</td></tr>
<tr><td>Cap period X+1</td></tr>
<tr><td>Cap period X+2</td><td rowspan="4">Annual review updates SMNCC for these cap periods (but subject to later annual review)</td><td rowspan="2">Annual review sets final SMNCC for these cap periods</td></tr>
<tr><td>Cap period X+3</td></tr>
<tr><td>Cap period X+4</td><td rowspan="2">Annual review updates SMNCC for these cap periods (but subject to later annual review)</td><td rowspan="2">Annual review sets final SMNCC for these cap periods</td></tr>
<tr><td>Cap period X+5</td></tr>
</table>

1.8. When we are unable to conclude our annual review as scheduled, this affects the timing of our annual review. We discuss in the next section how this has affected our timings in practice.

Consultation stages and process to date

1.9. In April 2021, we published two consultations on the SMNCC allowances in the cap. We published one consultation for credit meters ('April 2021 credit consultation') and one consultation for prepayment (PPM) meters ('April 2021 PPM consultation').[5] We refer to these collectively as the 'April 2021 consultations'. These consultations were part of our annual review of the SMNCC allowances to set these allowances from October 2021 onwards (ie from cap period seven, which runs from October 2021 to March 2022). We refer to this as the '2021 Annual Review'.[6]

[5] Ofgem (2021), Price Cap – final consultation on updating the credit SMNCC allowance. https://www.ofgem.gov.uk/publications/price-cap-final-consultation-updating-credit-smncc-allowance Ofgem (2021), Price Cap – final consultation on updating the PPM SMNCC allowance. https://www.ofgem.gov.uk/publications/price-cap-final-consultation-updating-ppm-smncc-allowance

[6] This name is based on when we originally intended to conclude this annual review. Given the timing changes discussed in this section, we have now concluded this annual review in February 2022.

1.10. Following the Department for Business, Energy and Industrial Strategy's (BEIS) decision on its new smart meter rollout framework ('framework'), we published an addendum to the April 2021 consultation ('addendum').[7,8] We explained that we intended to adopt a contingency allowance for cap period seven.

1.11. In August 2021, we published two decisions to set the SMNCC allowances for cap period seven – one for credit meters ('August 2021 credit decision') and one for PPM ('August 2021 PPM decision').[9] We refer to these collectively as the 'August 2021 decisions'. In these decisions, we confirmed our proposal from the addendum to set a contingency allowance for cap period seven. As a result of this, in October 2021 we published a consultation to reach a position on the SMNCC allowance for cap period eight ('October 2021 consultation').[10] Appendix 3 discusses stakeholder feedback on our consultation process.

Scope of the decision

1.12. This is our decision for the October 2021 consultation (the final consultation of the 2021 Annual Review). It sets the SMNCC allowance for cap period eight. We have also set SMNCC allowances for all remaining cap periods beyond cap period eight. However, we intend to update these SMNCC allowances as part of subsequent annual reviews.

1.13. This decision covers both the credit and PPM SMNCC allowances. We have produced a single decision given the similarities between our proposals for these areas. We indicate where a decision only applies to one meter type.

However, we maintain the name to avoid confusion with the annual review that we would conclude in August 2022 based on our normal timings (ie the 2022 Annual Review).

[7] BEIS (2021), Smart Meter Policy Framework post 2020: Government response to a consultation on minimum annual targets and reporting thresholds for energy suppliers. https://www.gov.uk/government/consultations/smart-meter-policy-framework-post-2020-minimum-annual-targets-and-reporting-thresholds-for-energy-suppliers

[8] Ofgem (2021), Price Cap – addendum to consultations on reviewing the credit and PPM SMNCC allowances. https://www.ofgem.gov.uk/publications/price-cap-addendum-consultations-reviewing-credit-and-ppm-smncc-allowances

[9] Ofgem (2021), Price Cap – Decision on credit SMNCC allowance. https://www.ofgem.gov.uk/publications/price-cap-decision-credit-smncc-allowance
Ofgem (2021), Price Cap – Decision on PPM SMNCC allowance. https://www.ofgem.gov.uk/publications/price-cap-decision-ppm-smncc-allowance

[10] Ofgem (2021), Price Cap – October 2021 consultation on credit and PPM SMNCC allowances. https://www.ofgem.gov.uk/publications/price-cap-october-2021-consultation-credit-and-ppm-smncc-allowances

1.14. For cap period eight, we have decided to set the credit SMNCC at £8.02 per typical dual fuel customer and the PPM SMNCC at -£7.47 per typical dual fuel customer (post-offset). Appendices 1 and 2 show the detail on the final credit SMNCC and final pre-offset PPM SMNCC values for individual fuels, as well as the final values for subsequent cap periods.[11]

1.15. Separately, in October 2021, we also published a working paper as the first step for our 2022 Annual Review.[12] We have considered stakeholder responses and are currently gathering data through a request for information (RFI). We intend to carry out the final consultation for the 2022 Annual Review in late spring 2022.

1.16. In response to the October 2021 consultation, we received stakeholder comments on other allowances in the cap. While these may be relevant to wider questions on the cap, they are out of scope for this particular decision, so we do not discuss them in this document.

Current market developments

1.17. We recognise that the unprecedented and unexpected rise in gas and electricity prices over recent months has put energy markets under severe strain. We have published several consultations to respond to these circumstances.[13] We have published a number of decisions for those consultations alongside this decision. This SMNCC decision is focussed on a specific component of the cap and is separate from those other decisions.

1.18. Some stakeholders commented on the impact of current market circumstances on the SMNCC. We consider this further in the 'Contingency allowance' section of Chapter 2 and in Appendix 4.

[11] The PPM SMNCC values in Appendix 2 are before the PPM cost offset is applied, while -£7.47 is the final PPM SMNCC after the PPM cost offset is applied.
[12] Ofgem (2021), Price Cap – Working paper on 2022 annual review of SMNCC allowances. https://www.ofgem.gov.uk/publications/price-cap-working-paper-2022-annual-review-smncc-allowances
[13] Ofgem (2021), Overview of 19th November 2021 Price Cap consultations. https://www.ofgem.gov.uk/publications/overview-19th-november-2021-price-cap-consultations
Ofgem (2021), Building energy market resilience. https://www.ofgem.gov.uk/publications/building-energy-market-resilience

2. Proposals from August 2021 decisions

Section summary

This chapter sets out our decisions relating to our October 2021 consultation proposals that were unchanged positions from our August 2021 decisions. It also covers the model updates we proposed in October 2021.

Structure of this chapter

2.1. Our August 2021 decisions determined our positions for cap period seven, which we used to update the SMNCC model for that cap period. As set out in those decisions, our intention was that we would maintain the same positions for future cap periods. We said that our decisions for cap period seven already represented what we considered the best approach for taking into account the revised start date for the new BEIS rollout framework.

2.2. In most areas, we therefore proposed to make the same decisions for the 2021 Annual Review (setting SMNCC values for cap period eight and beyond) as for cap period seven.[14]

2.3. In this chapter, we first cover areas where we have received no comments and continue to consider our proposed approaches to be the best ones. These areas therefore remain unchanged from our August 2021 decisions.

2.4. We then discuss the areas covered by our August 2021 decisions where we have received representations questioning our proposal. These are:

- the meter asset life for traditional PPM
- premature replacement charges (PRCs) for traditional PPM

[14] For our rationale on maintaining the decisions from August 2021, please see: Ofgem (2021), Price Cap – October 2021 consultation on credit and PPM SMNCC allowances, paragraph 2.2. https://www.ofgem.gov.uk/publications/price-cap-october-2021-consultation-credit-and-ppm-smncc-allowances

- the amortisation period for traditional PPM
- advanced payments
- contingency allowances.

2.5. Appendices 5 and 6 list the areas where we have changed our proposed position (for credit and PPM respectively).

Areas where no comments were received

2.6. The majority of our consultation proposals that were the same as the August 2021 decisions received no comments from stakeholders. We have decided to maintain these positions, as we consider that they are still the most appropriate ones. Appendices 7 and 8 list these decisions (for credit and PPM respectively). More details on individual decisions can be found in our August 2021 decisions using the references provided in those appendices.

2.7. In the October 2021 consultation, we discussed several potential model updates and two areas with new proposals since the August 2021 decisions. For some of these, stakeholders provided no comments. Appendix 9 provides an overview of the areas which received no comments.

Changed position – Traditional PPM asset life

Context

2.8. The traditional meter asset life determines the rate at which traditional meters expire and should be replaced. For the SMNCC, this primarily affects the benefits arising from the avoided costs of replacing expiring traditional meters with new meters (as a smart meter is installed instead).

2.9. In August 2021, we decided to set the traditional PPM asset life to 12 years for electricity and 10 years for gas.[15]

2.10. Our method plotted the number of traditional meters at each age (for each fuel) and identified the age at which this number started to decline. We then calculated the cumulative distribution of meters from this point to the last age in the data for each fuel. We set the meter asset life values at the median of this cumulative distribution. We explained that using the median value allowed us to account for the 'tail' in the meter age data to avoid an upward bias.

Decision

2.11. We have decided to change our approach to setting the PPM asset life in the SMNCC model. We have decided to set the traditional PPM asset life to **12 years for gas** and to **15 years for electricity**.[16] This is different from our October 2021 consultation proposal to maintain the traditional PPM asset life at 10 years for gas and 12 years for electricity. We consider that this revised approach improves the accuracy of our estimates, by focussing on the rate at which meters are likely to expire and by refining how we calculate the starting point for our analysis.

Overview of responses

2.12. Following our August 2021 decisions, we received responses from two suppliers and their economic advisers. They disagreed with our methodology for determining the traditional PPM asset life. The main points were that using the median age of live assets is not a good proxy for calculating a typical expiry age and that our methodology was not robust in selecting the starting point for calculating the median. Both suppliers' economic advisers said that we had therefore understated the typical expiry age and suggested increasing this to 15 years for both fuels.

[15] Ofgem (2021), Price Cap – Decision on PPM SMNCC allowance, paragraphs 3.7 to 3.26 https://www.ofgem.gov.uk/publications/price-cap-decision-ppm-smncc-allowance

[16] Please note that these values were obtained after rounding up or down in the age bracket in which the median meter falls. Please see our decision on rounding (section 'Changed position – Traditional PPM asset life: rounding') for further details.

Considerations

Feedback on our August 2021 decision approach

2.13. One supplier's economic adviser said that using the median age of live assets is not a good proxy for calculating a typical expiry age, even where the methodology only considers meters after a peak point. It said that the approach introduces a downward bias on the meter age by overweighting meters in younger age categories.

2.14. When using the RFI data on meter ages to estimate the typical expiry ages of traditional PPMs, there are a number of potential factors which could bias the results. Each option for estimating the expiry age involves trade-offs between potential biases. The appropriateness of any given methodology is therefore a judgement in the round.

2.15. There are a number of methodology options, which give a range of results. While we consider that our August 2021 decision approach was one appropriate option, we acknowledge that this approach returned meter ages at the lower end of the range. As such, taking into account stakeholder feedback, we considered two alternative approaches to potentially refine our methodology. We discuss these in the two subsequent sections.

2.16. One supplier's economic adviser questioned the robustness of our methodology in selecting the starting point for calculating the median.

2.17. We have taken this feedback into account when considering the design of one of our alternative approaches – see the section below 'Second alternative approach – implied expiry'.

First alternative approach – comparing distributions

2.18. Both suppliers' economic advisers said that our August 2021 decision methodology understated the typical expiry age. They said that it had produced a modelled age profile for operational meters which was not consistent with the meter age RFI data.[17] On that basis, both advisers suggested increasing the typical expiry age for both fuels to 15 years.

[17] They said that the linear distribution of traditional PPM produced by assuming meter asset lives of 10 and 12 years, for gas and electricity respectively, did not align closely with the cumulative distribution of operational meters produced by the RFI data.

2.19. Our first alternative approach is similar to that suggested by the economic advisers. In this approach, we compared the cumulative distribution of meters in the RFI data by age to the linear distributions implied by different assumed expiry ages.[18] We then looked for the linear distribution with the best fit to the cumulative distribution.

2.20. We found that all options tested under this approach were affected by an upward bias.

- Looking at the whole dataset overestimates the typical expiry date, as there are fewer young traditional meters as a result of the smart meter rollout (than if traditional meters had been installed at a broadly consistent rate). This reduction in young traditional meters is only reflected in the cumulative distribution by age, and not in the linear distributions.[19]

- We also considered truncating the dataset to only include older meters, in order to remove the impact of the smart meter rollout. However, this overstates the importance of the 'tail', as the tail would represent a greater fraction of the remaining meters.

Second alternative approach – implied expiry

2.21. We considered a second alternative option of looking at implied expiry. We started with the meter age data.[20]

- We first used this data to identify a starting point. The starting point is a proxy for the number of meters that would have been in place in each age bracket before meters started to expire. This proxy assumes that meters were installed at a broadly consistent rate in the years before and including the starting point.

[18] The linear distribution assumes that there are an equal number of meters installed in each year, and that all meters expire at the same rate. These linear distributions are a type of cumulative distribution, increasing by the same percentage at each age till reaching 100% at the expiry age.
[19] We noted the impact of the smart meter rollout on the age distribution of traditional meters in the August 2021 PPM decision.
Ofgem (2021), Price Cap - Decision on PPM SMNCC allowance, paragraph 3.24.
https://www.ofgem.gov.uk/publications/price-cap-decision-ppm-smncc-allowance
[20] For clarity, this is the same data which we had collected through an RFI in September 2019 and which we subsequently used for our calculations in the August 2021 decision.

- We then used the meter age data to construct an implied profile for meter expiry, after the starting point. We did this by subtracting from the number of meters at one age, the number of meters that are one year younger. This gave the number of meters assumed to expire at each age.

2.22. We then looked at the cumulative distribution of meters expiring after the designated starting point. We calculated the median age of this cumulative distribution and set it as the assumed typical meter asset life (after rounding).

2.23. This approach mitigates upward biases arising from particular features of the dataset.

- We reduce the impact of the smart meter rollout on the age distribution by calculating implied expiry after a specific point (rather than including age brackets impacted by the smart meter rollout).

- We reduce the impact of the 'tail' in the distribution by using a median value.

2.24. The key judgement under this approach is how to select the starting point. In relation to our August 2021 decision methodology, one supplier's economic adviser said that there may be variations in meter installations between years. As a result, the 'peak' age, obtained directly from the RFI data, may be an outlier.

2.25. As discussed further in Appendix 10, there are several factors which we would like to take into account in principle when selecting the starting point. One of these is variation in installations between years. The option we have decided to use (a three-year rolling average of the meter age data) takes this into account by avoiding relying on meters installed in a single year.[21]

2.26. We have decided to use our second alternative approach, as we consider that it is the most robust approach available. As set out above, the second alternative approach mitigates the risk of upward biases from the impact of the smart meter rollout or from the 'tail' of the distribution. These biases would be a concern under the first alternative

[21] We calculated a three-year average by taking the average of the number of meters in the given year, the year before and the year after. We repeat this for all the years in the dataset (except the first one, as there is no year before it) to calculate the three-year rolling average.

approach. We also consider that using a rolling average to select the starting point has reduced the risk of variations in installations across years biasing the results.

2.27. Should stakeholders have any comments on the approach we have decided to use, they will be able to raise these as part of the 2022 Annual Review.

Changed position – Traditional PPM asset life: rounding

Context

2.28. For technical reasons, the SMNCC model requires a meter asset life assumption that is expressed in whole years. This is to facilitate the calculation of the number of meters expiring each year. When we estimate a meter asset life, we therefore need to round it to a number in whole years.

2.29. We cannot calculate an exact meter asset life and then round this figure. This is because the meter age data we collected in 2019 divided meters into categories ('age brackets'), based on their age in whole years. We therefore do not hold precise data on the age of each meter.

2.30. In our August 2021 decision approach to calculating the PPM meter asset life, we used a median. We found the age bracket containing the median. We then expressed the meter asset life assumption as the lower bound of this age bracket, in effect rounding down.

Decision

2.31. We have decided to introduce a new rounding approach as part of the revised PPM asset life methodology. We have decided to round the assumed PPM asset life based on whether the median meter falls in the first or second half of its age bracket. We consider that this will slightly increase the accuracy of our methodology.

2.32. Therefore, taking the results from our implied expiry approach, we will now round the PPM asset life for electricity **up to 15 years**. Under the rounding approach in our August 2021 decision, this age would have been 14 years.

2.33. There is no effect on gas PPM, where the age is still rounded **down to 12 years**.

Overview of responses

2.34. We received responses from two suppliers and their economic advisers. They raised concerns that we had misinterpreted the meter age data, and consequently underestimated the typical expiry age.

Considerations

2.35. Two suppliers' economic advisers said that the actual asset life of meters labelled X years old in the supplier RFI data was, in reality, between X and X+364 days. This led to an understatement of the age in each age bracket.

2.36. Consequently, one supplier's economic advisor said that this resulted in an effective rounding down of the median value, whereby the assumed typical meter asset life always fell below the 50th percentile.

2.37. The RFI data does not allow us to determine the precise age of each meter. It only allows us to determine the year in which a meter was installed.

2.38. However, we consider that we are able to achieve better accuracy (than under our August 2021 decision approach) if we assume a linear distribution of installations within each year.[22] Under this assumption, we can calculate whether the age of the median meter falls in the first or second half of its age bracket, and then round up or down to the nearest full year.[23]

2.39. This approach still results in rounding down of the PPM asset life assumption for gas, but results in the PPM asset life assumption for electricity being rounded up.

- In the electricity data, the age of the median meter falls in the second half of its age bracket, so we round up.

[22] For our rounding calculation, we only need to assume a similar number of meter installations in the first and second half of a given year. As noted above, the SMNCC model requires a whole number as the asset life input, so we are unable to use fractions.
[23] For more details about our method to determine the position of the median value, please consult Appendix 10.

- In the gas data, the age of the median meter falls in the first half of its age bracket, so we round down. This delivers the same outcome as under the rounding approach in our August 2021 decision.

Changed position – PPM premature replacement charges

Context

2.40. Suppliers incur a charge for replacing a meter before the cost of that meter has been paid off – a PRC. In the SMNCC model, we calculate PRCs using a bottom-up modelled approach. This involves using asset and installation cost inputs to calculate a weighted average PRC across years, an assumption to capture that PRCs will generally decrease as the meter ages and the distribution of meter ages from RFI data.[24,25]

2.41. In the SMNCC model, the age after which PRCs no longer apply affects what proportion of replaced meters incur PRCs due to being replaced early. The August 2021 PPM decision maintained 10 years as the assumed age after which PRCs no longer apply for traditional PPMs. We also maintained this for the October 2021 consultation.

2.42. This was due to two reasons.

- We considered that both the assumptions on the age after which PRCs no longer apply and the amortisation period should align. PRCs will only be incurred during the contract period between Meter Asset Providers (MAPs) and suppliers, as the cost of a typical traditional meter should be paid off by the end of this period. We use the amortisation period to proxy the typical length of contracts, which we decided to set at 10 years. Therefore, the amortisation period should constrain the age until which PRCs are applicable.

- We checked this assumption using analysis of RFI data on the value of PRCs incurred across meter ages. This considered how much of the total PRC value is covered at 10 years, which we said was more than 90% of total PRCs. We

[24] We refer to this assumption as the age after which PRCs no longer apply or PRC age.
[25] This is explained further in the Technical Annex of the August 2020 credit decision: Ofgem (2020), Technical annex to reviewing smart metering costs in the default tariff cap: August 2020 decision, paragraph 3.178.
https://www.ofgem.gov.uk/publications/decision-reviewing-smart-metering-costs-default-tariff-cap

considered that this showed that our assumption gave a reasonable coverage of meters incurring PRCs, given the variation in contracts within and between suppliers.[26]

Decision

2.43. We have decided to maintain our methodology for calculating PRCs, using a bottom-up modelled approach.

2.44. We have decided to increase the assumption for the age after which PRCs no longer apply for traditional PPMs to 14 years for electricity and 12 years for gas. This is following refinements to our comparison against data from a 2019 RFI.

Overview of responses

2.45. One supplier and its economic adviser stated that the assumptions used to calculate PRCs for traditional gas PPMs are not reflective of the RFI data on gas PPM PRCs.

2.46. The same supplier and its economic adviser separately stated that we should increase the gas PPM asset life and amortisation period assumptions, but that doing so exacerbates the issue mentioned above. They said that we should make an adjustment to ensure that suppliers are not underfunded. We discuss the traditional PPM asset life assumptions earlier in this chapter ('Changed position – Traditional PPM asset life'), and we discuss the traditional PPM amortisation assumptions later in this chapter ('Changed position – PPM amortisation period').

Considerations

Overall PRC methodology – bottom-up modelled approach or using RFI data on PRC per meter

2.47. We use a bottom-up modelled approach to calculate the PRC per meter at a given age, rather than directly using the PRC per meter at each age from the RFI data.

[26] Ofgem (2020), Setting the PPM smart meter cost allowance in the default tariff cap – working paper, paragraph 3.45. https://www.ofgem.gov.uk/publications/setting-ppm-smart-meter-cost-allowance-default-tariff-cap-working-paper

2.48. One supplier's economic adviser stated that the assumptions used to calculate PRCs for traditional gas PPMs are not reflective of the 2019 RFI data on gas PPM PRCs per meter.[27] In its comparison of our modelled approach against the RFI data, it stated that our modelling overstates the PRC cost associated with replacing young gas PPMs but significantly understates the costs associated with replacing old gas PPMs. It stated that this leads to us increasingly understating the average gas PPM PRC to the industry over time.

2.49. We have decided to continue calculating PRCs using a bottom-up modelled approach. The weighted average of PRCs per meter from the 2019 RFI data is higher than our modelled estimate for gas.[28] However, the aim of our analysis is not to align to the PRC values per meter from the supplier data. As set out in previous publications, actual PRCs may not be a reliable guide because of:

- internal charges: some suppliers are also traditional meter owners, and do not charge an internal PRC. This approach ignores the real economic cost to the different sections of the business, one of which is the supply company.

- future cap periods: we are reviewing costs for all future cap periods, so even if we use the 2019 RFI data as a base, we need to make assumptions about how traditional meters will age. This collapses into some version of the bottom-up approach, because we would be carrying out modelling rather than solely relying on the RFI data.[29]

2.50. Following our decision to use a bottom-up modelled approach, we discuss below whether it is possible to refine how the bottom-up modelled approach works.

[27] The RFI data was collected in 2019, but the data itself is on suppliers' 2018 charges.
[28] As set out later in this chapter, we have decided to increase the age after which PRCs no longer apply for traditional gas PPMs from 10 years to 12 years. This reduces the difference from the RFI data, relative to the October 2021 consultation proposal.
[29] Ofgem (2020), Reviewing smart metering costs in the default tariff cap – Technical Annex, paragraph 3.185.
https://www.ofgem.gov.uk/publications/decision-reviewing-smart-metering-costs-default-tariff-cap
Ofgem (2021), Price Cap - Decision on PPM SMNCC allowance, paragraph 2.40.
https://www.ofgem.gov.uk/publications/price-cap-decision-ppm-smncc-allowance

Refining our bottom-up modelled approach – further analysis on the age after which PRCs no longer apply

2.51. We originally sense checked our 10-year PRC age assumption for traditional PPMs by checking how far 2019 RFI data on the total PRC value in 2018 aligned to this 10-year assumption.[30] Plotting a cumulative distribution of the total PRC value, our analysis suggested that by age 10 of the replaced meters, over 90% of the total PRC value is covered. We therefore considered that a 10-year PRC age assumption captured the majority of PRCs in our 2019 RFI data, giving a reasonable coverage of meters incurring PRCs, given the variation in contracts within and between suppliers.[31]

2.52. Following the August 2021 decision, one stakeholder said that this analysis would not account for the fact that PRCs generally decrease as the meter ages.

2.53. While we consider that our August 2021 decision was appropriate, we have considered whether it is possible to refine our analysis. We still carried out a comparison against the cumulative distribution of the total PRC value from the 2019 RFI. However, we adapted our analysis to reflect how PRCs may build up with the meter age, making it more comparable with the 2019 RFI data. We did this in two ways:

- taking into account the number of meters in each age bracket (as given by the 2019 RFI); the total PRCs will depend on the age distribution of meters, so accounting for this factor increases comparability with the PRC data from 2019.

- accounting for the fact that PRCs generally decrease as the meter ages.

2.54. We discuss this further analysis in more detail in Appendix 11.

2.55. This further analysis does not mean that we use the 2019 RFI data directly to set the PRC per meter for each age. We use a modelled bottom-up approach but use the 2019 RFI data when considering the appropriate assumption for the PRC age, which is one of the inputs to our bottom-up approach.

[30] The RFI data from suppliers detailed the total PRC value that is distributed across meter ages. This is not a PRC per meter value.
[31] Ofgem (2021), Price Cap - Decision on PPM SMNCC allowance, paragraph 3.33. https://www.ofgem.gov.uk/publications/price-cap-decision-ppm-smncc-allowance

2.56. There are some data quality issues with the 2019 RFI data (level of missing data for some suppliers and sample representativeness). However, we have sufficient confidence that increasing our PRC age assumptions in line with the further analysis increases accuracy, due to the refinement of our analysis described earlier. Moreover, even just using the higher PRC age assumptions from our further analysis as a sense-check suggests the previous 10-year assumption may be on the low side. We consider that collecting further data would not deliver a proportionate improvement in data quality. This is because we expect that some of the same data quality issues would arise again, given the comments some suppliers made in response to the 2019 RFI.

2.57. The further analysis would indicate PRC ages of 14 years for electricity and 13 years for gas. However, we have decided to set the traditional PPM asset life assumptions as 15 years for electricity and 12 years for gas (see the earlier section 'Changed position – Traditional PPM asset life').[32] The gas PRC age would therefore be slightly longer than the gas PPM asset life. We do not consider it coherent that PRCs could be incurred beyond the life of the meter itself – by their nature, PRCs are applied when meters are replaced prematurely.[33] We consider it appropriate to cap the gas PRC age assumption at the gas meter asset life. This reflects that we consider that the meter asset life analysis is somewhat more reliable than the PRC age analysis, given the data quality issues noted earlier. This leads to PRC age assumptions of 14 years for electricity and 12 years for gas.

2.58. One supplier and its economic adviser said that we should consult further on the calculation of PRCs. Given our considerations above and the refinements we have made, we consider that our revised approach is appropriate. However, should stakeholders have further comments, they will be able to raise these as part of our 2022 Annual Review.

Changed position – PPM amortisation period

Context

2.59. The amortisation period assumption determines the length of time that meter asset and installation costs are spread over. Our August 2021 PPM decision maintained the 10-year amortisation period for traditional PPMs, taken originally from the BEIS 2019 cost-

[32] These are the meter asset life values after rounding – ie the values we have decided to use in the SMNCC model.
[33] When setting the PRC and meter asset life assumptions, we are considering a typical case. Suppliers' individual commercial arrangements may vary.

benefit analysis for the smart meter rollout ('2019 CBA'). We also maintained this assumption in the October 2021 consultation.

Decision

2.60. We have decided to increase the amortisation period assumption for traditional PPMs to 15 years for electricity and 12 years for gas. This is a consequence of our change to the assumed age after which PRCs no longer apply.

Overview of responses

2.61. One supplier's economic adviser said that 2019 RFI data on gas PPM PRCs indicates that we should extend the amortisation period assumption for gas traditional PPMs.

Considerations

2.62. The appropriate assumption for the amortisation period depends on the PRC age and meter asset life.

2.63. We would not expect the amortisation period to be typically shorter than the PRC age. A supplier would typically pay off the meter and installation costs over the amortisation period, and there would not be an economic case for a PRC being charged beyond the point at which costs are paid off.

2.64. We would also not expect the typical amortisation period to be longer than the typical meter asset life, as this would require suppliers to be paying for meters that no longer exist.[34]

2.65. As set out earlier ('Changed position – PPM Premature Replacement Charges'), we have decided to increase the PRC age assumptions for traditional PPMs to 14 years for electricity and 12 years for gas. As a result, the amortisation period assumption should also increase to at least match the new PRC age, in order to satisfy the relationship we expect between PRCs and the amortisation period.

[34] Individual suppliers' contractual arrangements may vary, but we are concerned with the typical case.

2.66. For gas traditional PPMs, our decisions for the PRC age and meter asset life are both 12 years, so we have decided to adopt a 12-year amortisation period.

2.67. For electricity traditional PPMs, our decisions for the PRC age and meter asset life are 14 years and 15 years respectively. The amortisation period assumption could plausibly align to either the PRC or meter asset life assumption. We have decided to align this to the meter asset life (ie 15 years) as this is consistent with the approach on traditional credit meters (which is in turn in line with the 2019 CBA).

2.68. As a consequence of the change to the amortisation period, we updated the traditional gas PPM meter rental uplift. In Appendix 12, we discuss the consequential impact of our change to the amortisation period on the meter rental uplift.

Impact on the credit SMNCC and PPM SMNCC

2.69. Tables 2.1 and 2.2 show the impact of the changes to the PPM asset life, PPM PRC age and PPM amortisation period described in this chapter. Table 2.1 shows the impact on the PPM SMNCC. Table 2.2 shows the consequential impact of these changes on the credit SMNCC. This occurs through our adjustment for the costs included in the operating cost baseline (the 2017 baseline adjustment). By changing our assessment of PPM smart metering net costs in 2017, we are also slightly changing the proportions of total (across credit and PPM) smart metering costs which relate to each of credit and PPM, and therefore the 2017 baseline adjustment required.[35]

[35] For more information on the 2017 baseline adjustment, please see our August 2021 credit decision. Ofgem (2021), Price Cap - Decision on credit SMNCC allowance, Appendix 10, paragraph 1.21. https://www.ofgem.gov.uk/publications/price-cap-decision-credit-smncc-allowance

Table 2.1 - Impact of changes to PPM asset life, PPM PRC age and PPM amortisation period on the PPM SMNCC

	Cap period eight	Cap period nine	Cap period ten	Cap period eleven
Impact on PPM SMNCC	April 22 - Sept 22	Oct 22 - March 23	April 23 - Sept 23	Oct 23 - Dec 23
No cost offset – electricity	+2.04	+2.10	+2.16	+2.16
No cost offset - gas	+1.84	+2.85	+3.86	+3.86
After cost offset – electricity	0	0	0	0
After cost offset - gas	+1.84	+2.85	+3.86	+3.86

Note: All values are £/customer, nominal. These values reflect only the impact of the changes to the PPM asset life, PPM PRC age and PPM amortisation period assumptions. This impact will apply from 1 January 2021, when the prepayment level of the default tariff cap came into effect, due to advanced payments.

Table 2.2 - Impact of changes to PPM asset life, PPM PRC age and PPM amortisation period on the credit SMNCC

	Cap period eight	Cap period nine	Cap period ten	Cap period eleven
Impact on credit SMNCC	April 22 - Sept 22	Oct 22 - March 23	April 23 - Sept 23	Oct 23 - Dec 23
Electricity	-0.50	-0.50	-0.51	-0.51
Gas	-0.39	-0.40	-0.40	-0.40

Note: All values are £/customer, nominal. These values reflect only the impact of the changes to the PPM asset life, PPM PRC age and PPM amortisation period assumptions. This impact will apply from 1 January 2019, when the default tariff cap came into effect, due to advanced payments.

Changed position - Advanced payments

2.70. In our October 2021 consultation, we considered several points affecting our modelling and data for cap period eight.[36] We discuss advanced payments in this section, and the remaining points in Appendix 13.

Context

2.71. Advanced payments reflect when suppliers have received payment in advance for smart metering costs they have not yet incurred. The SMNCC model calculates advanced payments at a particular point in time (currently the start of cap period seven). In order to calculate advanced payments at a different point in time (eg the start of cap period eight), we said we would need to update the calculations so that they take into account which cap periods are historical and which are in the future.

2.72. In our October 2021 consultation, we stated that this change would allow us to include cap period seven within our calculation of advanced payments. We had previously flagged our decision to do this. In our August 2021 decisions, we said that we would consider the difference between the allowance provided and our modelled assessment of the SMNCC for cap period seven.[37]

Decisions

2.73. We have decided to update the SMNCC model to include cap period seven within our calculation of advanced payments. This is a mechanical adjustment and does not represent any shift in policy intent for calculating advanced payments.

2.74. We have decided to update our calculation of advanced payments with the latest customer numbers, from October 2021, to improve accuracy.

[36] Ofgem (2021), Price Cap – October 2021 consultation on credit and PPM SMNCC allowances, paragraphs 2.6-2.14. https://www.ofgem.gov.uk/publications/price-cap-october-2021-consultation-credit-and-ppm-smncc-allowances
[37] Ofgem (2021), Price Cap – Decision on credit SMNCC allowance, paragraph 1.8. https://www.ofgem.gov.uk/publications/price-cap-decision-credit-smncc-allowance
Ofgem (2021), Price Cap - Decision on PPM SMNCC allowance, paragraph 1.8. https://www.ofgem.gov.uk/publications/price-cap-decision-ppm-smncc-allowance

2.75. We have decided to amend our calculation of advanced payments to exclude all the suppliers who have gone through the Supplier of Last Resort (SoLR) process since 2019, when the default tariff cap was implemented. This change helps the advanced payments calculation to better reflect the circumstances of the suppliers remaining in the market.

Overview of responses

2.76. Three suppliers commented on this issue, raising various concerns. The main points related to the principle of advanced payments and the impacts of supplier failures.

2.77. One supplier said that recent market events undermined the ability of the advanced payments calculation to accurately true up SMNCC allowances over time.

Considerations

Future impacts of gas prices

2.78. One supplier's economic adviser stated that recent supplier failures are likely to significantly increase the number of credit customers subject to the cap during cap period seven. However, if gas prices were to fall after winter, it stated that cheaper fixed price deals would be expected to emerge, which would cause the number of price capped customers to fall. It stated that significant variations in the number of customers subject to the cap over time will lead to fluctuations in advanced payments and therefore the SMNCC. It said that this would make the planning of smart programme budgets harder and introduce volatility into bills.

2.79. We have decided to update our calculation of advanced payments with the latest customer numbers (from October 2021). These are the actual customer account numbers at the start of cap period seven, so our advanced payments calculation accounts for the recent increase in the number of customers subject to the cap.[38] This improves the accuracy of our calculation.

2.80. There is a great deal of uncertainty around customer movements in cap period eight. We cannot be sure how or when gas prices will change. We also cannot be sure how

[38] Our advanced payments methodology measures the number of default tariff customers in a given cap period by using the number of customers at the start of that cap period. Using the October 2021 data for cap period seven is therefore consistent with our approach to other cap periods.

or when customers will react to any lower priced deals resulting from gas price changes. We therefore do not consider that forecasting the trend in customer accounts and using this to amend our advanced payments calculation is likely to improve accuracy.

2.81. We will also have the actual customer account numbers for cap period eight by our decision on the 2022 Annual Review, so any discrepancy due to using our established method is only temporary.

2.82. One supplier's economic adviser stated that, while we adjust our calculation of advanced payments for the total number of customers covered by the cap at the industry level, we make no adjustment for variation in customer numbers at a supplier level. It stated that this exposes all suppliers to the risk that the advanced payment calculation is not reflective of their individual position. It stated that this risk will be magnified by the significant changes in many suppliers' customer portfolios driven by recent wholesale prices.

2.83. We must set a single cap level across suppliers, so there may be differences between the allowance we set and individual suppliers' positions. This is an unavoidable consequence of setting a single allowance that protects customers.

Impact of recent supplier failures on accumulated advanced payments

2.84. One supplier's legal adviser stated that any advanced payments to suppliers that recently exited the market are effectively lost at industry level. It stated that, as a result, financially sound and efficient suppliers, who have complied with their smart meter rollout obligations, will receive less favourable treatment than suppliers which benefitted from the full level of the SMNCC allowance before entering the SoLR scheme.

2.85. We consider the point about differences in treatment between current and former suppliers here. We respond to separate feedback about the impact on the rollout profiles we use to calculate advanced payments in Appendix 13.

2.86. We are setting a SMNCC allowance for future cap periods. By definition, this only applies to suppliers who remain in the market, so the advanced payment adjustment cannot impact suppliers who have already exited the market. Current and former suppliers will therefore be able to recover different amounts through the SMNCC (taking into account both historical SMNCC values and future adjustments for advanced payments).

2.87. We consider that this difference in treatment (between current and former suppliers) is justified. There is no way to recover advanced payments from suppliers who have exited the market. We consider that the benefits of taking advanced payments into account outweigh any difference in outcomes for current and former suppliers. In particular, in the case where the cumulative allowances have been above the cumulative costs, taking advanced payments into account helps to protect customers. This is in line with the objective of the Domestic Gas and Electricity (Tariff Cap) Act 2018 ('the Act').[39]

2.88. Nevertheless, taking into consideration the current exceptional market circumstances (with numerous supplier exits in a short period of time), we have decided to amend the calculation for this decision. This is to better reflect advanced payments for current suppliers. We have done this by excluding the customer accounts of the suppliers who have gone through the SoLR process between January 2019 (when the default tariff cap came into place) and December 2021.[40,41,42] This means that the historical customer account numbers that we have previously used in the SMNCC model to calculate advanced payments have also changed. From the point of view of advanced payments, it is as if these suppliers never existed in the market.

2.89. As this decision was made based on the current exceptional market circumstances, this is a one-off change to our advanced payments calculation. Making the same adjustment each time a supplier exits the market in future is unlikely to be proportionate. However, we would consider the appropriate approach depending on the circumstances, particularly the scale of any future supplier failures.

[39] Domestic Gas and Electricity (Tariff Cap) Act 2018. https://www.legislation.gov.uk/ukpga/2018/21/contents/enacted

[40] We only exclude suppliers that have gone through the SoLR process, as we are making this adjustment to account for the impact of numerous suppliers having recently gone through the SoLR process. Moreover, we do not want to exclude suppliers who have exited the market for other reasons. For example, where a supplier was acquired by another supplier, any benefits arising from previous advanced payments could affect the value of the acquired supplier. The acquiring supplier would take this value into account when making a commercial decision about the amount to pay. Previous advanced payments would therefore not be lost to the industry in the same way as if a supplier exits through the SoLR process.

[41] We do not exclude a supplier subject to the Special Administration Regime, as this licensee remains in the market.

[42] We have used a December 2021 cut-off to allow us time to finalise and quality assure our analysis ahead of this decision, reducing the risk of errors.

Impact on the credit SMNCC and PPM SMNCC

2.90. The impact of our amendments was small. This is partly because only a small percentage of the customers of the suppliers that went through the SoLR process were on default tariffs. From cap period eight onwards, the impact on the dual fuel credit SMNCC is an increase of £0.12 in each cap period. From cap period eight onwards, the impact of on the dual fuel PPM SMNCC (post-offset) is a reduction of £0.02 in each cap period.

Other considerations

2.91. There were a few other points raised by stakeholders that we considered, but which did not lead to any amendments to our advanced payments methodology. We discuss these in Appendix 13.

Calculation issue

2.92. Appendix 12 discusses a minor calculation issue affecting PPM advanced payments.

Unchanged position – Contingency allowance

Context

2.93. A contingency allowance ensures that there is still a reasonable SMNCC allowance in place, even if we are not able to conclude our review in time. Under a contingency approach, we would only set an SMNCC allowance for the upcoming cap period (cap period eight), rather than for all remaining cap periods.

2.94. In our October 2021 consultation, we explained how we proposed to set the contingency allowance if we required one. We proposed to use the updated SMNCC model as a starting point and adapt this to set the contingency allowance. We also said that, if we considered that we could place limited or no weight on the updated SMNCC model to set the contingency allowance, we would propose to use the same SMNCC values as in cap period seven.[43]

[43] Ofgem (2021), Price Cap – October 2021 consultation on credit and PPM SMNCC allowances, paragraphs 2.19 and 2.20. https://www.ofgem.gov.uk/publications/price-cap-october-2021-consultation-credit-and-ppm-smncc-allowances

Decision

2.95. We have decided that we do not require a contingency allowance for cap period eight. We do not consider that the changes that we have made following the October 2021 consultation prevent us from concluding our review. We also do not consider that we need to freeze the SMNCC allowance due to current market circumstances.

Overview of responses

2.96. Stakeholders did not comment on the option of going to contingency as a result of model changes.

2.97. Several stakeholders raised concerns about our October 2021 consultation proposals given current market circumstances. One supplier said that, given the current market circumstances, we should not make our proposed changes to reduce the SMNCC allowances. It said we should adopt a contingency approach instead.

Considerations

Contingency due to model changes

2.98. We have made several changes to our SMNCC calculations following the October 2021 consultation.[44] However, we do not consider that these changes require us to adopt a contingency approach, as we have been able to conclude our annual review. We have considered the issues raised in previous stakeholder feedback, made changes to respond to them where appropriate, and been able to calculate revised SMNCC values in time for this decision.

2.99. We intend to consult on our next annual review in late spring 2022. Should stakeholders identify any further refinements in approach for the areas where we have made changes, they will be able to suggest them in response to that consultation. In the event that we make further changes, we would take into account the impact on our modelled SMNCC values for previous cap periods through advanced payments.

[44] The changes largely affect the PPM SMNCC, as two of the main changes are to the PPM asset life and PPM premature replacement charges. However, these changes have a consequential impact on the credit SMNCC through the 2017 baseline adjustment.

Freezing SMNCC due to current market circumstances

2.100. This section is about whether we should freeze the SMNCC values at the same level as for cap period seven, due to current market circumstances linked to the rise in wholesale gas prices.

2.101. Despite current market circumstances, we still consider that we should use our calculated SMNCC values. These calculated SMNCC values reflect our revised assessment of suppliers' smart metering costs. Using these SMNCC values therefore supports the accuracy of the SMNCC allowances. In addition, as noted in Chapter 1, we have published other decisions which respond to current market circumstances. This decision is focussed only on setting the SMNCC.

2.102. We respond to stakeholders' detailed comments in Appendix 4.

Unchanged position – Offsetting additional PPM costs

Context

2.103. Customers with traditional PPMs have higher costs to serve than direct debit (DD) customers with traditional meters. As part of setting a PPM level of the default tariff cap, we decided in our August 2020 decision to reflect this difference through a PPM-specific payment method uplift ('PPM uplift').[45]

2.104. In our May 2020 consultation, we estimated that the cost to serve PPM customers compared to DD customers (when both have traditional meters) could be up to £17 (£7.95 electricity, £8.97 gas) higher than the Competition and Markets Authority's (CMA) PPM uplift.[46] This was an upper bound. We refer to the £17 difference between the CMA level and our upper bound estimate as the potential additional PPM costs.

[45] Ofgem (2020), Protecting energy consumers with prepayment meters: August 2020 decision, paragraphs 4.1 and 4.6. https://www.ofgem.gov.uk/publications/decision-protecting-energy-consumers-prepayment-meters
[46] Ofgem (2020), Statutory consultation for protecting energy consumers with prepayment meters, paragraph 4.25. https://www.ofgem.gov.uk/publications/statutory-consultation-protecting-energy-consumers-prepayment-meters

2.105. In our August 2020 decision, we decided to adopt the CMA's PPM cost differential between PPM customers and DD customers for our PPM uplift. We called this a tariff differential approach.

2.106. We acknowledged that PPM specialists may under-recover their efficient costs through the existing operating cost allowance.[47]

2.107. As the smart meter rollout continues, the PPM SMNCC allowance determined by our model will grow increasingly negative. However, we decided we would not use this allowance to reduce the PPM cap level until the potential additional PPM costs were fully recovered from PPM customers. We termed this the PPM cost offset.

2.108. In our August 2021 PPM decision, we decided to use a PPM cost offset that works on a cap period basis rather than cumulatively, for cap period seven.[48] In our October 2021 consultation, we proposed to maintain this position.

Decision

2.109. We have decided to continue to use a PPM cost offset that works on a cap period basis rather than cumulatively. This means that for a given cap period, any remaining under-recovered PPM costs that cannot be offset by the current PPM SMNCC will not be carried over to the next cap period.

Overview of responses

2.110. One supplier commented on this issue. Its comments were primarily on the impact of the PPM cost offset on different suppliers and the ability of suppliers to recover their efficient costs under the offset.

[47] The CMA PPM cap was in place prior to Ofgem introducing a PPM level in the default tariff cap in January 2021.
[48] Ofgem (2021), Price Cap - Decision on PPM SMNCC allowance, paragraph 3.89. https://www.ofgem.gov.uk/publications/price-cap-decision-ppm-smncc-allowance

Considerations

Impacts on different suppliers

2.111. One supplier said that to prevent the full recovery of efficient costs for one group of suppliers is clearly unfair and discriminatory.

2.112. We implemented the PPM cost offset because we acknowledge that PPM specialists cannot recover the potential additional PPM costs over all their default tariff customers. However, the energy market cannot be easily split into two distinct groups of suppliers based on the composition of customers. Different suppliers will have different proportions of each customer type, so they will not all be able to recover costs in exactly same way. We must set a single cap level, so there may be differences between the allowance we set and individual suppliers' efficient costs. This is an unavoidable consequence of setting a single allowance that protects customers, and does not indicate discrimination against one group of suppliers in favour of another.

Supplier recovery of efficient costs

2.113. The supplier stated that the £17 is an under-statement of the PPM uplift, compared to had it been calculated in a consistent way with our assessment of the operating costs associated with standard credit and DD customers.

2.114. We have explained why we consider the £17 to be an upper bound in our May 2020 PPM consultation.[49]

2.115. The supplier said that we appear not to have considered that suppliers have a licence obligation to supply PPM customers and therefore must be able to fund this. It stated that our justification for the tariff differential approach and using a per cap period offset appears to be that we have pre-determined that the cap should not increase because of the final PPM SMNCC.

2.116. We have not made such a pre-determination. In fact, if the SMNCC model produced a positive PPM SMNCC value, we would use it. The tariff differential approach only means

[49] Ofgem (2020), Protecting energy consumers with prepayment meters: May 2020 consultation, paragraphs 4.37 - 4.55. https://www.ofgem.gov.uk/publications/statutory-consultation-protecting-energy-consumers-prepayment-meters

that we would not add on the potential additional costs to a negative PPM SMNCC value from the model to the extent that it would become positive. We have explained our reasons for the tariff differential approach, including our consideration of the impact on supplier recovery of efficient costs, in previous publications, including our August 2021 PPM decision.[50] We have explained our reasons for using a per cap period offset in our April 2021 PPM consultation.[51]

2.117. The supplier stated that we did not acknowledge that PPM-specialist suppliers will not be able to recover their efficient costs and as such finance their businesses. It stated that we made no attempt to justify this approach by reference to our statutory obligations.

2.118. Section 1(6) of the Act requires us to have regard to supplier financeability, alongside the three other matters to which we are required to have regard. We have taken supplier financeability into consideration. The cost offset is to fund traditional PPM costs-to-serve. One of our reasons for deciding on the tariff differential approach was that the rollout of smart meters should erode the high cost differential between serving traditional PPM customers and traditional credit customers. On that basis, the disadvantage faced by PPM specialists from serving a greater proportion of expensive traditional PPM customers should be temporary.

2.119. The supplier stated that maintaining cross subsidies across credit and PPM customers in price caps set already below efficient costs has two effects. First, it said that even efficient suppliers, and especially those serving predominantly PPM customers, will eventually be forced out of the market. Secondly, it said that suppliers are either dissuaded from competing for PPM customers or encouraged to reduce standards of service for PPM customers.

2.120. As the disadvantage faced by PPM specialists from serving a greater proportion of expensive traditional PPM customers should be temporary, we do not expect our tariff differential approach to have long-term effects that could lead to supplier exits or a reduction in quality of service for PPM customers.

[50] Ofgem (2021), Price Cap - Decision on PPM SMNCC allowance, paragraphs 3.95 – 3.100. https://www.ofgem.gov.uk/publications/price-cap-decision-ppm-smncc-allowance
[51] Ofgem (2021), Price Cap - final consultation on updating the PPM SMNCC allowance, paragraph 4.77-4.83. https://www.ofgem.gov.uk/publications/price-cap-final-consultation-updating-ppm-smncc-allowance

2.121. Moreover, this erosion of the cost differential means that, in the absence of both the tariff differential approach and the PPM cost offset, we would expect the differential between the credit and PPM levels of the cap to reduce. Therefore, by using the negative PPM SMNCC to offset the potential additional costs of PPM specialists, we are slowing down the closing of this gap. As we also consider that these are only potential additional costs and that the £17 is an upper bound, we do not consider that our approach distorts cost recovery for suppliers to the extent that the supplier's comment suggests.

Alternative method

2.122. The supplier suggested using a levelisation process, as exists for the Warm Home Discount (WHD) and Feed-in-Tariff (FiT) schemes, instead of the PPM cost offset. It stated that a single price cap for all payment methods could be accompanied by a suitably levelised discounted tariff or annual payment for customers in fuel poverty. It said that this solution would resolve problems with the current method.

2.123. Replacing the payment method-specific levels of the cap with a single level for all payment methods is out of scope for this decision on the SMNCC. In our November 2018 decision, we explained that we set payment method-specific levels of the cap as customers on different payment methods have different efficient costs to serve.[52]

2.124. Considerations on a levelised discounted tariff, annual payment or any other policy targeting fuel poverty are also out of scope of this decision.

[52] Ofgem (2018), Decision – Default tariff cap – Overview document, paragraphs 2.67-2.73. https://www.ofgem.gov.uk/publications/default-tariff-cap-decision-overview

3. New proposals since August 2021 decisions

Section summary

This section sets out our decisions on two new proposals which we have put forward since the August 2021 decisions, relating to the PPM SMNCC.

Correcting for overestimation of traditional PPM installations during COVID-19

Context

3.1. In our August 2021 PPM decision, we decided to set the traditional PPM asset life to 12 years for electricity and 10 years for gas.[53] This was a reduction of the traditional PPM asset life values we proposed in our April 2021 PPM consultation.[54]

3.2. The assumptions on traditional PPM asset life affect the number of traditional PPM that expire each year in the SMNCC model. Therefore, our reduction in the assumed traditional PPM asset life increased the number of traditional PPM that need to be replaced over the life of the cap. The SMNCC model assumes that expiring traditional meters are replaced with smart meters, as long as the number of meters that need to be replaced does not exceed the smart meter rollout. If it does exceed rollout, the expired meters are assumed to be replaced by traditional meters.

3.3. In the August 2021 PPM decision, we highlighted that the SMNCC model's assumption for the number of traditional PPM installations in 2020 was unrealistically high. This was because it did not reflect the impact of COVID-19 on meter installations. To correct this, we proposed to implement payment method-specific COVID-19 parameters in the SMNCC model.[55] We proposed to set the PPM-specific COVID-19 parameter to 70%. This assumes that the number of traditional meters expiring in 2020 would be at 70% of the level that it would have been absent COVID-19. This assumption was based on 2021

[53] Ofgem (2021), Price Cap - Decision on PPM SMNCC allowance, paragraph 3.11. https://www.ofgem.gov.uk/publications/price-cap-decision-ppm-smncc-allowance
[54] Our April 2021 consultation proposal was 14 years for electricity and 12 years for gas. Ofgem (2021), Price Cap - final consultation on updating the PPM SMNCC allowance, paragraph 4.13. https://www.ofgem.gov.uk/publications/price-cap-final-consultation-updating-ppm-smncc-allowance
[55] Since the reduction in PPM asset lifetimes affected only PPM, we needed a PPM-specific adjustment.

RFI data that showed suppliers achieved 70% of their expected 2020 smart PPM installations.

3.4. We proposed to set the credit-specific COVID-19 parameter to 100%, meaning that there would be no impact on the credit SMNCC.

Decision

3.5. We have decided to implement payment method-specific COVID-19 parameters in the SMNCC model. This is to allow us to consider separately the impact of COVID-19 on credit and PPM installations.

3.6. We have decided to set the PPM-specific COVID-19 parameter to 70%. This assumes that the number of traditional meters expiring in 2020 would be at 70% of the level that it would have been absent COVID-19, based on a 2021 RFI for smart meters.

3.7. We have decided to set the credit-specific COVID-19 parameter to 100%. This is because the SMNCC model's estimate of 2020 traditional credit meter installations is already representative of actual 2020 traditional credit meter installations, even with no adjustment applied.

Overview of responses

3.8. One supplier's economic adviser commented on this issue. It stated that the formula that we apply to the 70% COVID-19 parameter contains a formula error.

3.9. It also stated that, given that the impact we are accounting for is due to COVID-19 and that the parameters are applied to traditional PPMs, the parameters should also have been applied to traditional PPMs installed in the counterfactual scenario.

3.10. It also stated that part of the issue we are trying to correct using the COVID-19 parameters has, in fact, been caused by an error in our assumptions about asset lives. We discuss our decision on the traditional PPM asset life assumptions in Chapter 2.

Considerations

Correcting formula error

3.11. We discuss this in Appendix 12, on additional model updates.

COVID-19 parameter and the counterfactual

3.12. The SMNCC model includes a counterfactual scenario, without smart metering. One supplier's economic adviser said that we should apply the COVID-19 adjustment to the counterfactual.

3.13. We compare 2020 costs to the 2017 baseline year as part of calculating the SMNCC allowance. This means that we are not trying to consider 2020 costs in isolation – we are trying to understand how the net costs of smart metering have changed over time.

3.14. The net costs of smart metering depend on both the costs that suppliers actually incur and the costs that they avoid. For PPM, suppliers have a net benefit in installing a smart PPM instead of a traditional PPM, by avoiding the costs associated with a traditional PPM.

3.15. In the model, applying the COVID-19 adjustment reduces the number of meters replaced. If we were to apply the COVID-19 adjustment to the counterfactual, the number of traditional meter installations would decrease in 2020, but 2017 would be unaffected. This would reduce the level of avoided costs in 2020 only.

3.16. The avoided costs in 2020 would therefore be lower than in 2017. This would result in a higher SMNCC allowance. It is not logical to increase the allowance (which would imply a cost increase), when COVID-19 reduced meter installations (and thus meter installation costs) in 2020.

Impact of change to meter asset life

3.17. Increasing the meter asset life for traditional PPM reduces the number of these meters which expire each year in the SMNCC model. We already proposed to reduce the number of traditional PPM expiring in 2020 by applying the COVID-19 parameter, so increasing the meter asset life means a further reduction.

3.18. One supplier's economic adviser said that if we increased the meter asset life, we should change the COVID-19 parameter as a consequence, to reduce the impact of the COVID-19 adjustment.[56]

3.19. The economic adviser's suggestion was to hold the number of traditional electricity meters installed in 2020 at the same level as the approach in our October 2021 consultation. To achieve this (under its proposal to adopt a 15 year asset life), it said that we should apply an 8% adjustment to PPM expiry in 2020.[57]

3.20. This would mean applying a different adjustment percentage to traditional PPM compared to smart PPM. The economic adviser stated that this is supported by a greater proportion of traditional meters being installed during lockdown than during periods unaffected by COVID-19.

3.21. First, we do not consider that there is an automatic need to adjust the COVID-19 parameter as a consequence of our changes to the meter asset life, because we are not seeking to maintain a particular absolute number of installations. Our proposal to apply the 70% COVID-19 parameter was triggered by the discrepancy between the SMNCC model's estimate of 2020 traditional PPM installations and actual 2020 installation numbers. While we wanted to reduce this discrepancy, it was not our aim to have our estimate exactly match traditional PPM installation data (at market level).

3.22. Second, we are still content with the rationale for proposing a COVID-19 parameter of 70%. 70% was the proportion of suppliers' expected installations for smart meters in PPM mode which they managed to achieve in 2020.[58] We would only consider changing this if traditional PPMs and smart PPMs were affected differently by COVID-19 to a material extent. We do not consider that this is the case. While a greater proportion of meter installations during lockdown were of traditional meters than during periods unaffected by

[56] The COVID-19 parameter is a percentage value. Increasing the COVID-19 parameter (moving it closer to 100%) would reduce the impact of the adjustment.
[57] The 8% figure was based on the economic adviser's analysis for electricity. For gas, the economic adviser stated that, preferably, we should ask suppliers how many traditional gas PPM were installed in 2020 and use this data to calibrate the adjustment. Failing this, it suggested using the same 8% as it had suggested for electricity PPM.
[58] Ofgem (2021), Price cap – October 2021 consultation on credit and PPM SMNCC allowances, paragraph 3.16. https://www.ofgem.gov.uk/publications/price-cap-october-2021-consultation-credit-and-ppm-smncc-allowances

COVID-19, the number of traditional meter installations still fell in 2020. This suggests that this activity was affected by COVID-19.

3.23. Third, we have carried out a sense-check against installation data, which also does not demonstrate an issue with the parameter we proposed. We have used BEIS data to sense-check the model's estimate of 2020 traditional PPM installations after applying the revised meter asset life values and the 70% parameter. The revised estimate aligns with the BEIS data on traditional PPM installations (including both fuels).[59]

3.24. There is a small understatement of traditional credit meter installations in 2020. However, this is a small proportion of total credit installations (smart and traditional), so we do not consider that this is material.

Impact of COVID-19 parameter on the PPM SMNCC

3.25. The impact of this decision can be seen in Table 3.1. Our decision will have a downward impact on the PPM SMNCC values calculated for previous cap periods. As noted in our October 2021 consultation, we will correct for this through advanced payments.

[59] In our October 2021 consultation, we compared our estimate of the number of traditional electricity meter installations against Elexon data on the number of traditional electricity meter installations (across credit and PPM installations as a whole). We referred to this as "one possible sense-check". Ofgem (2021), Price cap – October 2021 consultation on credit and PPM SMNCC allowances, paragraph 3.18. https://www.ofgem.gov.uk/publications/price-cap-october-2021-consultation-credit-and-ppm-smncc-allowances

Table 3.1 - Impact of COVID-19 parameter on the PPM SMNCC

Impact on PPM SMNCC	Cap period eight April 22 - Sept 22	Cap period nine Oct 22 - March 23	Cap period ten April 23 - Sept 23	Cap period eleven Oct 23 - Dec 23
No cost offset - electricity	-0.29	-0.30	-0.30	-0.30
No cost offset - gas	-0.86	-0.87	-0.88	-0.88
After cost offset - electricity	0	0	0	0
After cost offset - gas	-0.86	-0.87	-0.88	-0.88

Note: All values are £/customer, nominal. These values reflect only the impact of the COVID-19 parameter. This impact will apply from 1 January 2021, when the prepayment level of the default tariff cap came into effect, due to advanced payments.

Correcting for overestimation of traditional meter installations in 2022-23

3.26. This decision is set out in Appendix 9, with the other areas which received no comments.

Appendices

Index

Appendix 1 – Credit SMNCC values

1.1 We have decided to make the changes to the credit SMNCC (as set out in this decision) in the document 'Annex 5 – Methodology for determining the Smart Metering Net Cost Change' referred to in standard condition 28AD of the electricity and gas supply licences.

1.2 Within that document, we have decided to make changes to sheet '2a Non pass-through costs', cells P7:S8.

1.3 The values we have decided to insert are set out in the table below. These are the output values from the SMNCC model we have disclosed, including revisions.

Table A1.1: Values to insert into Annex 5 of SLC28AD

Fuel	Cap period eight	Cap period nine	Cap period ten	Cap period eleven
Electricity	9.06	9.23	9.41	9.41
Gas	-1.04	-1.21	-1.39	-1.39

Notes: All values are £/customer, nominal.

Appendix 2 – PPM SMNCC values

1.1 We have decided to make the changes to the PPM SMNCC (as set out in this decision) in the document 'Annex 5 – Methodology for determining the Smart Metering Net Cost Change' referred to in standard condition 28AD of the electricity and gas supply licences.

1.2 Within that document, we have decided to make changes to sheet '2a Non pass-through costs', cells P9:S10.

1.3 The values we have decided to insert are set out in the table below. These are the output values from the SMNCC model we have disclosed, including revisions.

1.4 The values in the table are before the PPM cost offset has been applied. The PPM cost offset is only applied to these values once they have been inserted into Annex 5.

Table A2.1: Values to insert into Annex 5 of SLC28AD

Fuel	Cap period eight	Cap period nine	Cap period ten	Cap period eleven
Electricity	-1.26	-1.86	-2.47	-2.47
Gas	-17.54	-20.14	-22.74	-22.74

Notes: All values are £/customer, nominal. These SMNCC values are before the PPM cost offset has been applied.

Appendix 3 – Process feedback

1.1 One supplier disagreed with our use of a 28-day consultation period.

1.2 We are not required to provide stakeholders with a longer consultation period. We also do not consider that a longer consultation period would have been proportionate for the October 2021 consultation. This is because it contained only a small number of new proposals, and largely followed on from previous publications.

1.3 The supplier also said that we had initially failed to disclose the version of the SMNCC model from the August 2021 decision. It said that "stakeholders were deprived of access to essential information necessary to fully understand Ofgem's consultation proposals for more than a week, effectively truncating the consultation window by more than a third".

1.4 We do not agree with this characterisation. Our original disclosure was sufficient to allow stakeholders to respond to the October 2021 consultation. Stakeholders participating in the disclosure exercise had access to the October 2021 SMNCC model and associated supporting models, with changes over time highlighted. These stakeholders also had access to the SMNCC model and supporting analysis files from our April 2021 consultations. All stakeholders could also refer to our detailed August 2021 decisions, as well as the October 2021 consultation document.

1.5 While we additionally disclosed the August 2021 SMNCC model following a letter from one supplier's legal adviser, this did not mean that we accepted the submissions that it had made.

1.6 One supplier stated that there was a lack of acknowledgement from us on the issues surrounding advanced payments that it raised in response to the April 2021 consultation. It said that given current market circumstances, it was important to consult on other cap allowances (including headroom) alongside advanced payments.

1.7 In our August 2021 decisions, we responded to this supplier's comments on advanced payments that it submitted in response to the April 2021 consultation.[60] We therefore do not consider it necessary to respond again. If there is further detail that stakeholders would like to add to their previous responses, they can do so in response to future consultations, as some chose to do in response to the October 2021 consultation.

1.8 We separately consider feedback on current market circumstances in Appendix 4.

[60] Ofgem (2021), Price Cap – Decision on credit SMNCC allowance, Appendix 12, paragraph 1.30. https://www.ofgem.gov.uk/publications/price-cap-decision-credit-smncc-allowance
Ofgem (2021), Price Cap - Decision on PPM SMNCC allowance, paragraphs 6.14-6.15. https://www.ofgem.gov.uk/publications/price-cap-decision-ppm-smncc-allowance

Appendix 4 – Responding to stakeholder comments on current market circumstances

1.1 This appendix responds to stakeholder comments on current market circumstances. For our decision on whether to freeze the SMNCC allowances at the cap seven levels, please see Chapter 2.

Stringency of the SMNCC allowance

1.2 One supplier's legal adviser said that we were proposing to tighten the SMNCC allowance. It said that this was irrational at a time when a large number of suppliers were struggling.

1.3 Our decision to set the cap period eight SMNCC allowances using the calculated cap period eight SMNCC values means that these allowances will be lower than in cap period seven.[61] However, this does not represent a decision to make the SMNCC allowances more stringent. Our calculated SMNCC allowances for cap period eight are different from those for cap period seven for two reasons.

1.4 First, the SMNCC allowances vary over time as our estimates of suppliers' smart metering activities, and the associated net costs, change. The estimated costs in cap period eight would always have been different from those in cap period seven, regardless of our October 2021 consultation proposals.

1.5 A reduction in the level of the SMNCC allowance due to changing costs over time does not mean that we have made the SMNCC allowance more stringent. If suppliers' efficient costs have also reduced, there would be no net effect on their finances. This avoids the concern about impacting suppliers in the current market circumstances.

1.6 Second, we have made design changes, based on the proposals in the October 2021 consultation and our consideration of stakeholder feedback.

[61] After applying the PPM offset.

1.7 Again, this reflects an updated estimate of the efficient costs of suppliers' smart metering activities. We proposed corrections in our October 2021 consultation. These corrections address issues with the SMNCC model which had previously led to the gas PPM SMNCC being too high. Correcting these issues does not represent a decision to make the SMNCC more stringent.

Wider changes to the cap

1.8 Two suppliers referred to our intention to consult on wider changes to the cap to reflect current market circumstances. Since the deadline for responses to the October 2021 consultation, we published a set of consultations on 19 November 2021 setting out proposals to amend the cap.[62] We have published decisions on those consultations on the same day as this decision document. We have therefore addressed other issues through separate publications – our SMNCC publications are focussed on a specific component of the cap.

Financeability

1.9 Several stakeholders said that we should further consider suppliers' ability to finance their licensed activities in the current market circumstances, referring to section 1(6) of the Act. One supplier said that we had not correctly applied or appropriately weighted our obligations under section 1(6) of the Act. Another supplier's legal adviser said that "Ofgem must ensure that energy suppliers are able to finance their efficiently incurred costs". It said that the October 2021 consultation failed to consider this duty.

1.10 It is first important to be clear on the statutory framework. Section 1(6) of the Act states that we must "have regard to the following matters … (d) the need to ensure that holders of supply licences who operate efficiently are able to finance activities authorised by the licence". As noted in previous publications, the requirement to have regard to the four matters identified in section 1(6) of the Act does not mean

[62] Ofgem (2021), Overview of 19th November 2021 Price Cap consultations. https://www.ofgem.gov.uk/publications/overview-19th-november-2021-price-cap-consultations

that we must achieve all of these.[63] We confirm that we have had regard to supplier financeability while making our decisions.

1.11 This decision relates to our annual review of the SMNCC allowances, which are one component of the cap. We do not need to consider all other elements of the cap at the same time when considering changes to a particular component. As noted in the section above, we have considered the impacts of current market developments on other components of the cap through separate consultations and decisions.

1.12 Our October 2021 consultation should also not be seen in isolation. Rather, it follows on from an extensive consultation process on the SMNCC allowance, including our April 2021 consultations which led to our August 2021 decisions. While those previous documents did not consider the impact of current market developments, they did consider financeability in relation to aspects of the SMNCC allowances. We did not repeat material from the August 2021 decisions when consulting in October on maintaining positions from August. Instead, we cross-referred to those decisions.[64] Stakeholders were therefore able to examine our previous considerations on financeability during the October 2021 consultation.

[63] Eg Ofgem (2021), Price Cap - Decision on credit SMNCC allowance, paragraph 1.23. https://www.ofgem.gov.uk/publications/price-cap-decision-credit-smncc-allowance
[64] Ofgem (2021), Price Cap – October 2021 consultation on credit and PPM SMNCC allowances, paragraph 2.4. https://www.ofgem.gov.uk/publications/price-cap-october-2021-consultation-credit-and-ppm-smncc-allowances

Appendix 5 – Decisions with changes from proposals – credit

Table A5.1 – Decisions with changes from proposals – credit

Category	Original proposal	Decision	Location in the decision document
Calculating SMNCC	N/A	Update advanced payment adjustment calculation with latest customer numbers (October 2021)	Chapter 2, section 'Changed position – advanced payments'
Calculating SMNCC	N/A	Exclude suppliers subject to SoLR process from the customer numbers used to calculate advanced payments	Chapter 2, section 'Changed position – advanced payments'

Appendix 6 – Decisions with changes from proposals – PPM

Table A6.1 – Decisions with changes from proposals - PPM

Category	Original proposal	Decision	Location in the Decision document
Costs	Meter asset life of 12 years for electricity PPM and 10 years for gas PPM	Meter asset life of 15 years for electricity PPM and 12 years for gas PPM	Chapter 2, section 'Changed position – Traditional PPM asset life'
Costs	Round PPM asset life down to the nearest whole year	Round PPM asset life up or down depending on whether the median meter falls in the first or second half of its age bracket	Chapter 2, section 'Changed position – Traditional PPM asset life: rounding'
Costs	N/A	Correct formula error in 2020 traditional meter COVID-19 adjustment	Appendix 12, section 'Calculation issue for COVID-19 adjustment'
Costs	PRCs apply until 10 years for PPM	PRCs apply until 14 years for electricity PPM and 12 years for gas PPM	Chapter 2, section 'Changed position – PPM premature replacement charges'

Category	Original proposal	Decision	Location in the Decision document
Costs	Amortisation period of 10 years for PPM	Amortisation period of 15 years for electricity PPM and 12 years for gas PPM	Chapter 2, section 'Changed position – PPM amortisation period'
Calculating SMNCC	N/A	Update advanced payment adjustment calculation with latest customer numbers (October 2021)	Chapter 2, section 'Changed position – advanced payments'
Calculating SMNCC	N/A	Exclude suppliers subject to SoLR process from the customer numbers used to calculate advanced payments	Chapter 2, section 'Changed position – advanced payments'
Calculating SMNCC	N/A	Correct minor calculation issue for PPM advanced payments	Appendix 12, section 'Calculation issue for PPM advanced payments'

Appendix 7 – Decisions unchanged from proposals - credit

1.1 The table below provides an overview of the positions from the August 2021 credit SMNCC decision which we have decided to maintain for cap period eight and beyond. It includes paragraph references to the location of the specific position in the August 2021 credit SMNCC decision. The August 2021 credit SMNCC decision provides more information on the topics mentioned below.

1.2 In some cases, the position in the August 2021 credit SMNCC decision reported or followed on from a previous decision. Not all positions in the table below therefore were new decisions in August 2021.

Table A7.1: Credit SMNCC decisions which maintain a position from the August 2021 credit SMNCC decision

Category	Summary of proposal	Location in August 2021 credit SMNCC decision
Rollout	Maintain principles for considering rollout profiles	Paragraph 2.11
Rollout	Use a market leader tolerance rollout profile	Paragraph 2.21
Rollout	Estimate rollout in the first half of 2021 by using actual data for the first quarter (Q1) 2021 and suppliers' updated projections for Q2 2021	Paragraph 2.22
Rollout	Estimate rollout in the second half of 2021 by using suppliers' projections for Q2 2021 for each of the remaining quarters of 2021	Paragraph 2.22
Rollout	Apply different rollout profiles for each fuel, estimated by looking at historical data for rollout across large energy suppliers	Paragraph 2.23
Rollout	Update the following inputs to the SMNCC model: the profile for the proportion of SMETS1 meters enrolled with the Data Communications Company (DCC), the date at which SMETS1 meters are treated as enrolled, the proportion of SMETS1 meters expiring early, the scaling factors for the proportion of SMETS1 meters losing smart functionality, and the proportion of installations which are SMETS1 or SMETS2 for 2020 and 2021	Appendix 10, paragraph 1.29

Category	Summary of proposal	Location in August 2021 credit SMNCC decision
Costs	Estimate sunk installation costs in 2020 by using an average of the values calculated using two approaches (referred to methods one and two in the August 2021 credit SMNCC decision)	Paragraph 3.15
Costs	Include sunk installation costs for 2021	Paragraph 3.38
Costs	Estimate sunk installation costs in 2021 using a bottom-up approach	Paragraph 3.39
Costs	Do not include sunk installation costs for the years beyond 2021	Paragraph 3.55
Costs	Estimate the cost per installation achieved for 2020 using an average of the costs per installation associated with the two methods that we use for calculating sunk installation costs in 2020	Paragraph 3.65
Costs	Use the same cost per installation as we use in our bottom-up approach to project sunk installation costs for 2021	Paragraph 3.75
Costs	Do not use the cost per installation for 2021 as the starting point for projecting installation costs in future years (ie 2022 and 2023)	Paragraph 3.76
Costs	Include BEIS's assumed improvement in operational fulfilment	Appendix 9, paragraph 1.7
Costs	Apply the improvement in operational fulfilment to a base level of productivity which is the average productivity between 2017 and 2019	Appendix 9, paragraph 1.8
Costs	Maintain the current (ie August 2020 decision) approach to calculating marketing costs	Appendix 9, paragraph 1.27
Costs	Do not increase the unit costs of smart meter assets and installations due to the change in rollout profile (since our August 2020 decision)	Appendix 9, paragraph 1.45
Costs	Update the SMNCC model using SMAIR data for the costs of smart meters, communications hubs and IHDs (in line with our August 2020 credit SMNCC decision)	Appendix 10, paragraph 1.5

Category	Summary of proposal	Location in August 2021 credit SMNCC decision
Costs	Do not use SMAIR data to update smart meter installation costs	Appendix 10, paragraph 1.6
Costs	Make consequential edits as a result of using the SMAIR data: remove optimism bias from the 2020 values, start any assumed cost erosion from after the last actual data, and update the baseline adjustment for payment methods	Appendix 10, paragraph 1.8
Costs	Turn off the bottleneck uplifts in the SMNCC model	Appendix 10, paragraph 1.30
Costs	Update the meter rental uplift values	Appendix 10, paragraph 1.31
Costs	Maintain approach from April 2021 consultation for: the proportion of in-home displays (IHDs) replaced at the end of their life, changes over time for the number of installers in training, the expiry date for traditional meters, and the smart metering costs included in the operating cost allowance (all points except the expiry date for traditional meters relating to our August 2020 credit SMNCC decision)	Appendix 10, paragraphs 1.52 and 1.53
Benefits	Update the SMNCC model using SMAIR data for the number and cost of avoided site visits (in line with our August 2020 credit SMNCC decision)	Appendix 10, paragraph 1.5
Benefits	Update four additional smart metering benefits using SMAIR data: change of supplier, inbound enquiries, debt, and remote change of tariff	Appendix 10, paragraph 1.7
Calculating SMNCC	Include advanced payments (in line with our August 2020 credit SMNCC decision)	Paragraph 4.11
Calculating SMNCC	Assess uncertainty qualitatively	Appendix 11, paragraph 1.7
Calculating SMNCC	Do not make a numerical uncertainty adjustment	Appendix 11, paragraph 1.8
Other	Do not gather other data to update the SMNCC model	Appendix 10, paragraph 1.23

Appendix 8 – Decisions unchanged from proposals - PPM

1.1 Table A8.1 below provides an overview of the positions from the August 2021 PPM SMNCC decision that we have decided to maintain for cap period eight and beyond. It includes paragraph references to the location of the specific position in the August 2021 PPM SMNCC decision. The August 2021 PPM SMNCC decision provides more information on the topics mentioned below.

1.2 In some cases, the position in the August 2021 PPM SMNCC decision reported or followed on from a previous decision. Not all positions in the table below therefore were new decisions in August 2021.

1.3 Table A8.2 then lists the additional proposals from the October 2021 consultation which we have decided to implement.

Table A8.1: PPM SMNCC decisions which maintain a position from the August 2021 PPM SMNCC decision

Category	Summary of proposal	Location in August 2021 PPM SMNCC decision
Rollout	Update the following inputs to the SMNCC model: the profile for the proportion of SMETS1 meters enrolled with the DCC, the date at which SMETS1 meters are treated as enrolled, the proportion of SMETS1 meters expiring early, the scaling factors for the proportion of SMETS1 meters losing smart functionality, and the proportion of installations which are SMETS1 or SMETS2 for 2020 and 2021	Paragraph 2.171
Rollout	Set a PPM-specific rollout profile for the PPM SMNCC	Paragraph 4.8
Rollout	Continue using the SMNCC model to set the PPM SMNCC	Paragraph 4.16
Rollout	Use a single rollout profile	Paragraph 4.28
Rollout	Remove outliers from our sample of suppliers used to calculate the weighted average rollout profile, to	Paragraph 4.29

Category	Summary of proposal	Location in August 2021 PPM SMNCC decision
	make it broadly reflective of the average cost of rolling out smart meters.	
Rollout	Apply different rollout profiles for each fuel, estimated by looking at historical data for rollout across large energy suppliers	Paragraph 4.30
Rollout	Use supplier rollout data for the period 2017-2020. Use a modelled approach to set the profile for the period 2011-2016.	Paragraph 5.14
Rollout	Use actual Q1 2021 smart PPM rollout numbers to represent this quarter in the PPM-specific rollout profile	Paragraph 5.28
Rollout	Use suppliers' updated rollout plans provided to BEIS for Q2 2021 to model rollout progress by the end of H1 2021	Paragraph 5.29
Rollout	Set the PPM SMNCC allowance based on the market average PPM rollout, split by fuel	Paragraph 5.48
Rollout	Set the PPM SMNCC based on the minimum installation obligation (tolerance)	Paragraph 5.70
Costs	Use the same cost per smart PPM installation and smart meter rental uplifts (MRUs) as the credit SMNCC.	Paragraph 2.10
Costs	Use the PPM-specific SMAIR values for traditional meter installation costs.	Paragraph 2.11
Costs	Use SMAIR data for smart meter asset costs, using the same smart meter asset unit cost as in the credit SMNCC	Paragraph 2.19
Costs	Use SMAIR data to include the cost of non-interoperable SMETS1 communications hubs, using	Paragraph 2.20

Category	Summary of proposal	Location in August 2021 PPM SMNCC decision
	the same communications hub unit cost as for the credit SMNCC.	
Costs	Use SMAIR data for estimating IHD costs, adopting the same calculation approach as credit	Paragraph 2.21, 2.22
Costs	Use PPM-specific traditional meter asset costs	Paragraph 2.23
Costs	Use the same calculation approach of premature replacement charges (PRCs) for PPM as for credit.	Paragraph 2.35
Costs	To calculate PRCs for PPM, use PPM-specific asset costs, installation costs, MRUs and asset lifetimes and rollout profile	Paragraph 2.36
Costs	For both traditional and SMETS1 meters, include the asset and installation costs that a supplier avoids in future years after replacing a meter early.	Paragraph 2.42
Costs	Use the same supplier IT costs as for credit meters (on a per meter basis)	Paragraph 2.48
Costs	Use PPM-specific values for the net operating and maintenance (O&M) costs of smart meter rollout, based on RFI data.	Paragraph 2.53
Costs	Not apply an "optimism bias" adjustment to the changes in O&M costs resulting from switching to a smart meter from a gas traditional meter.	Paragraph 2.54
Costs	Estimate sunk installation costs in 2020 by using an average of the values calculated using two approaches (referred to methods one and two in the August 2021 PPM SMNCC decision)	Paragraph 2.92
Costs	Include sunk installation costs for 2021	Paragraph 2.94
Costs	Estimate sunk installation costs in 2021 using a bottom-up approach	Paragraph 2.95

Category	Summary of proposal	Location in August 2021 PPM SMNCC decision
Costs	Do not include sunk installation costs for the years beyond 2021	Paragraph 2.96
Costs	Estimate the cost per installation achieved for 2020 using an average of the costs per installation associated with the two methods that we use for calculating sunk installation costs in 2020	Paragraph 2.98
Costs	Use the same cost per installation as we use in our bottom-up approach to project sunk installation costs for 2021	Paragraph 2.100
Costs	Do not use the cost per installation for 2021 as the starting point for projecting installation costs in future years (ie 2022 and 2023)	Paragraph 2.101
Costs	Include BEIS's assumed improvement in operational fulfilment	Paragraph 2.136
Costs	Apply the improvement in operational fulfilment to a base level of productivity which is the average productivity between 2017 and 2019	Paragraph 2.137
Costs	Maintain the current (ie August 2020 credit decision) approach to calculating marketing costs	Paragraph 2.144
Costs	Do not increase the unit costs of smart meter assets and installations due to the change in rollout profile	Paragraph 2.150
Costs	Use the same organisational costs as for credit meters (on a per meter basis)	Paragraph 2.155
Costs	Update the SMNCC model using SMAIR data for the costs of smart meters, communications hubs and IHDs	Paragraph 2.161
Costs	Do not use SMAIR data to update smart meter installation costs	Paragraph 2.162

Category	Summary of proposal	Location in August 2021 PPM SMNCC decision
Costs	Make consequential edits as a result of using the SMAIR data: remove optimism bias from the 2020 values, start any assumed cost erosion from after the last actual data, and update the baseline adjustment for payment methods	Paragraph 2.163
Costs	Turn off the bottleneck uplifts in the SMNCC model	Paragraph 2.173
Costs	Maintain the assumed reduction in training costs when projecting installation costs at the time of our April 2021 consultation	Paragraph 2.178
Benefits	Update the SMNCC model using SMAIR data for the number and cost of avoided site visits	Paragraph 2.161
Benefits	Account for PPM operational benefits using the PPM cost-to-serve (CTS) benefit calculation in the SMNCC model.	Paragraph 3.43
Benefits	Use February 2021 RFI data to calculate the PPM CTS benefit, excluding three suppliers from our RFI sample	Paragraph 3.44
Benefits	Retain methodology of calculating the operational cost savings of replacing a traditional PPM with a smart PPM across individual suppliers and then calculating a weighted average of those savings	Paragraph 3.45
Benefits	Not using 2020 data we collected as part of the February 2021 RFI since it would be impacted by COVID-19	Paragraph 3.46
Benefits	Apply a 12% reduction to the final PPM CTS benefit to address concerns of inconsistency between the benefit and the 2017 operating cost benchmark	Paragraph 3.47
Calculating SMNCC	Correct for the differing efficiency benchmark definitions used for the operating cost allowance and	Paragraph 2.66

Category	Summary of proposal	Location in August 2021 PPM SMNCC decision
	the SMNCC, by subtracting the lower quartile 2017 baseline costs from the relevant year's average efficient costs.	
Calculating SMNCC	Excluding one supplier from the weighted average PPM rollout profile used for the calculation, given it was not included in our operating cost benchmarking analysis and had high smart metering costs relating to PPM from our calculation of the 2017 benchmark.	Paragraph 2.76
Calculating SMNCC	Removing the impact of weighted average smart meter costs in the operating cost allowance by applying a downward adjustment to the PPM SMNCC	Paragraph 2.77
Calculating SMNCC	Use the same methodology as the credit SMNCC to convert annual SMNCC allowances to six-month cap periods	Paragraph 2.126
Calculating SMNCC	Remove the nil consumption scalar for the PPM SMNCC.	Paragraph 3.76
Calculating SMNCC	Use a PPM cost offset that works on a cap period basis rather than cumulatively.	Paragraph 3.80
Calculating SMNCC	Implement the PPM cost offset in the Annex 5 model (in line with our August 2020 PPM decision)	Paragraph 3.91
Calculating SMNCC	Calculate advanced payments using the net SMNCC for PPM (after we have applied the PPM cost offset), rather than the SMNCC determined by the model	Paragraph 6.7
Calculating SMNCC	Assess uncertainty qualitatively	Appendix 3, paragraph 1.3
Calculating SMNCC	Do not make a numerical uncertainty adjustment	Appendix 3, paragraph 1.4
Other	Do not gather other data to update the SMNCC model	Paragraph 2.167

Table A8.2: PPM SMNCC decisions which maintain a position from the October 2021 consultation

Category	Decision	Location in this decision document
Rollout	Implement payment method-specific COVID-19 parameters in the SMNCC model	Chapter 3, section 'Correcting for overestimation of traditional PPM installations during COVID-19'
Rollout	Set the PPM-specific COVID-19 parameter to 70%	Chapter 3, section 'Correcting for overestimation of traditional PPM installations during COVID-19'
Rollout	Set the credit-specific COVID-19 parameter to 100%	Chapter 3, section 'Correcting for overestimation of traditional PPM installations during COVID-19'
Rollout	Amend formulae in the SMNCC model to correct for the overestimation of traditional meter installations in 2022-23, for both credit and PPM	Appendix 9, section 'Correcting for overestimation of traditional meter installations in 2022-23'

Appendix 9 – Areas which received no comments

Smart Meters Annual Information Request (SMAIR) data

Context

1.1 As part of an annual review, we would usually update key inputs using Smart Meters Annual Information Request (SMAIR) data. As explained in our October 2021 consultation, this data is available on an annual basis (in the spring).[65] Due to this review being carried out in the winter, we do not have new SMAIR data available to update these inputs.

Decision

1.2 We confirm that we have made no edits using SMAIR data as part of this February 2022 decision. The SMNCC model already includes the latest information available.

Rollout data

Context

1.3 Our October 2021 consultation proposal on rollout data was to use the same rollout profiles as the August 2021 decisions, noting there has since been no change to BEIS's framework.[66] Nevertheless, we still considered whether to change the levels of rollout in 2021, using new data on actual levels of rollout in Q2 and Q3 2021.

1.4 We further explained that we intended to use SMAIR data on rollout in 2021 to update the rollout profiles as part of our 2022 Annual Review.

Decision

1.5 In line with our October 2021 consultation proposal, we are not updating the rollout profiles for cap period eight. We consider that the values used are sufficiently

[65] Ofgem (2021), Price cap – October 2021 consultation on credit and PPM SMNCC allowances, paragraph 2.8. https://www.ofgem.gov.uk/publications/price-cap-october-2021-consultation-credit-and-ppm-smncc-allowances

[66] Ofgem (2021), Price cap – October 2021 consultation on credit and PPM SMNCC allowances, paragraph 2.9. https://www.ofgem.gov.uk/publications/price-cap-october-2021-consultation-credit-and-ppm-smncc-allowances

accurate for our 2021 Annual Review. Likely gains in accuracy would not be sufficiently large to justify making structural changes to the rollout models at the post-consultation stage.

1.6 However, we intend to use data on 2021 rollout from the SMAIR (expected in spring 2022) to update the rollout profiles as part of the 2022 Annual Review. As noted, if there are differences between the rollout profile we use for the 2021 Annual Review and the revised rollout profile we use for the 2022 Annual Review, we would take this into account through advanced payments. This means that the impact of any inaccuracy in the rollout values would be temporary (at an aggregate level across suppliers).

Other data updates

Context

1.7 In our October 2021 consultation, we said that we did not intend to carry out any further data gathering.[67] This is the same position as in our August 2021 decisions, where we did not consider that further data gathering was likely to increase the accuracy of the SMNCC model significantly, or that this would be a proportionate use of resources.[68]

Decision

1.8 In line with our August 2021 decisions and October 2021 consultation, we are not making other data updates.

Correcting for overestimation of traditional meter installations in 2022-23

Context

[67] Ofgem (2021), Price cap – October 2021 consultation on credit and PPM SMNCC allowances, paragraph 2.14.
https://www.ofgem.gov.uk/publications/price-cap-october-2021-consultation-credit-and-ppm-smncc-allowances
[68] Ofgem (2021), Price cap – Decision on credit SMNCC allowance, Appendix 10, paragraph 1.23.
https://www.ofgem.gov.uk/publications/price-cap-decision-credit-smncc-allowance
Ofgem (2021), Price cap – Decision on PPM SMNCC allowance, paragraph 2.167.
https://www.ofgem.gov.uk/publications/price-cap-decision-ppm-smncc-allowance

1.9 The SMNCC model from our August 2021 decisions considered two types of expiring traditional meters as part of calculating the number of traditional meters that need to be installed in a year.

1.10 For the expired traditional meters installed before 2012, the calculation considered whether they can be replaced by smart meters, using the average rollout profile.[69] If there are not enough smart meter installations to replace all of the expired traditional meters, the model assumed traditional meter installations make up the difference.

1.11 However, for the expired traditional meters installed 2012 onwards, the model assumed that these meters are always replaced by other traditional meters. Following our August 2021 PPM decision to reduce the assumed PPM asset lifetimes, the SMNCC model assumed an increased number of traditional PPM installed in 2012-13 to expire by 2022 and 2023. Consequently, the model calculated unrealistically high traditional PPM installations in 2022 and 2023.

1.12 As we explained in our October 2021 consultation, this is a purely mechanical issue and there is no policy reason for this to be the case. In fact, since 30 June 2019, the New and Replacement Obligation (NRO) requires energy suppliers to take all reasonable steps to install a SMETS2 meter wherever a meter is replaced or where a meter is installed for the first time.[70,71]

1.13 This does not have a practical impact on the asset lifetimes assumed for traditional credit meters due to the longer asset life of those meters (20 years for both electricity and gas).

1.14 We proposed to amend the formulae in the SMNCC model to correct for this overestimation, for both credit and PPM. In each case we proposed to calculate the number of traditional meter installations needed to replace expired traditional

[69] In August 2021, we decided to set the PPM SMNCC allowance based on the market average PPM rollout, split by fuel.
Ofgem (2021), Price Cap - Decision on PPM SMNCC allowance, paragraph 5.48.
https://www.ofgem.gov.uk/publications/price-cap-decision-ppm-smncc-allowance
[70] SMETS2 are the second generation of smart meters.
[71] Ofgem (2019), Smart Meter Rollout Open Letter - June 2019, p5.
https://www.ofgem.gov.uk/publications/smart-meter-rollout-energy-suppliers-progress-and-future-plans-open-letter-june-2019

meters, of those installed since 2012, by first calculating the number of smart meters available to replace them.[72]

Decision

1.15 We have decided to amend formulae in the SMNCC model to correct for the overestimation of traditional meter installations in 2022-23, for both credit and PPM. We have decided to amend the formulae so that they calculate the number of traditional meter installations needed to replace expired traditional meters, of those installed since 2012, by first calculating the number of smart meters available to replace them.

1.16 We consider that making these amendments will ensure the PPM SMNCC better reflects the true efficient costs of the smart meter rollout, for the reasons set out in our October 2021 consultation.[73]

1.17 This decision has no practical impact on the SMNCC due to our decision to increase the traditional PPM asset life assumptions to 15 years for electricity and 12 years for gas. We discuss this decision in Chapter 2.

[72] Ofgem (2021), Price cap – October 2021 consultation on credit and PPM SMNCC allowances, paragraph 3.28. https://www.ofgem.gov.uk/publications/price-cap-october-2021-consultation-credit-and-ppm-smncc-allowances

[73] Ofgem (2021), Price cap – October 2021 consultation on credit and PPM SMNCC allowances, paragraph 3.29. https://www.ofgem.gov.uk/publications/price-cap-october-2021-consultation-credit-and-ppm-smncc-allowances

Appendix 10 – Calculating traditional PPM asset life assumptions

1.1 This annex provides further details on the importance of the starting point under the implied expiry approach, the options considered for setting the starting point under that approach and the calculations for our revised rounding methodology.

Implied expiry approach – importance of the starting point

1.2 The number of meters in an age bracket will depend on the number that were installed in the year associated with that age bracket, and the number which have since been removed (including on expiry).

1.3 The number of meters installed in a given year will be affected by the smart meter rollout. Fewer traditional meters have been installed since the rollout began. However, there is also likely to be natural variation in installation numbers between years due to other factors.

1.4 Ideally, we would have a starting point which was unaffected by all three of: expiry, the smart meter rollout, and other factors affecting installations.

- **Expiry:** We would like to select the median age of meter expiry, which would mean looking at the full period over which meters expire. We would therefore ideally like our starting point to be before meters begin to expire. In isolation, this consideration would therefore tend towards setting the starting point in a younger age bracket.

- **Smart meter rollout:** Due to the smart meter rollout, fewer traditional meters would be installed in younger age brackets. If the starting point was affected by the smart meter rollout, then the change in the number of meters between age brackets could understate the actual expiry rate. (In other words, the comparison between age brackets would not take into account that suppliers had installed different numbers of smart meters over time). We would therefore ideally like our starting point to be unaffected by the smart meter rollout. In isolation, this consideration would tend towards setting the starting point in an older age bracket.

- **Other factors affecting installations:** If an age bracket had a large number of meters installed due to other factors, then it might be likely to be selected as a starting point. Any decline in the number of meters in older age brackets could therefore be the result of variations in installation numbers between years, but would appear in our analysis as if there was a high rate of expiry since the starting point. We would therefore ideally like our starting point to reflect the typical number of meters installed, with as little impact as possible from other factors. In isolation, this consideration would tend towards setting the starting point based on an average of multiple years, rather than data from a single year.

1.5 However, in practice there are some trade-offs between these desirable features.

Implied expiry approach – options considered for setting the starting point

1.6 We tested and compared four options for obtaining this starting point. These options are set out in Table A10.1 below.

Table A10.1: Overview of options to determine the starting point for calculating cumulative implied expiry

	Using meter numbers in one year	Using a rolling average of meter numbers
Calculating the peak age as the starting point	**Option A:** the peak is obtained directly from the 2018 data	**Option B:** the peak is calculated using a rolling average of multiple years
Selecting a fixed point before rollout (year 2011)	**Option C:** the starting point is year 2011	**Option D:** average of three years before the rollout is used for the starting point

1.7 We have decided to use Option B, which takes as the starting point the peak of a three-year rolling average of meter numbers. This is for two reasons.

- By taking an average, we account for any bias caused by year to year variations in the number of PPM installed due to factors other than the smart meter rollout.

- For electricity, this option also implicitly accounts for any impact of the smart meter rollout, as the peak value at age 11 (2007) removes the rollout years from the calculation. For gas PPM, where the peak is at age 6 (2012), we are confident that any effects of the smart meter rollout are limited due to the very small number of smart meters that suppliers installed in 2012.

1.8 Option C sought to look at only traditional meters installed before the smart meter rollout by taking 2011 as the starting point. Option D controlled for possible variations in the installation numbers across the last three years before the smart meter rollout. However, while both options mitigate the effect of the smart meter rollout on installations, they risk including some of the impact of meters starting to expire. This is particularly the case for gas PPM, given that these meters are likely to have a shorter life than electricity PPM.

1.9 We have decided not to use options C and D. However, the resulting PPM asset life assumptions were close to the results obtained under Option B. (After rounding, options C and D both give PPM meter asset lives of 15 years for electricity and 13 years for gas. This is in comparison to 15 years and 12 years for our preferred option B). This supports the view that our preferred option yields representative results.

1.10 We also tested whether taking an average of a different number of years under Option B would produce different results. We took a rolling average of two, four, and five years and compared it to the three-year option. We found that these averages introduced additional biases.

- With two- and four-year averages, and any even numbered rolling average, the given year cannot be the middle year. Therefore, it is not possible to include as many future years in the calculation as preceding years.

- A five-year average flattened the age profile so much that it distorted the peak value. This wide average is likely to include impacts of the smart meter rollout on installations and expiring meters. Therefore, although this average mitigates the risk of variations in installation numbers between years due to other factors, it has limitations.

Rounding calculations

1.11 We have decided to adopt a new rounding method when setting the traditional PPM asset life assumptions. Upon obtaining the age bracket where the 50th percentile meter expires, we determined whether the median value lies in the first or second half of that bracket. We then rounded up or down to the nearest full year accordingly.

1.12 We do this by, first, finding the mid-point of the age bracket, and then comparing the median value to the mid-point value. We use the following formula:

x = (Cumulative percentage of expiring meters in the median age bracket + cumulative percentage in the previous age bracket) / 2

If x > 50%, round down (median lies 'to the left of the midpoint')
If x < 50%, round up (median lies 'to the right of the midpoint')

Appendix 11 – Revised Premature Replacement Charge methodology

1.1 This appendix briefly describes our revised PRC methodology.

1.2 In summary, we:

- develop cumulative profiles for PRCs, based on different assumptions for the age after which PRCs no longer apply;
- calculate an equivalent cumulative profile for PRCs based on RFI data; and
- select the assumption which is closest to the RFI data, by comparing the cumulative profiles.

Implied cumulative profile for total PRCs, using PRC age assumptions

1.3 We start by considering how the PRC per meter would vary for a particular meter depending on the age of the meter. This solely depends on the assumption for the age after which PRCs no longer apply ('PRC age'), as we assume that PRCs decrease linearly with the meter age.

1.4 We test a number of assumptions for the PRC age, by constructing a profile for each assumption on how the PRC per meter changes with the meter age. These profiles are in percentage terms. This can be seen as a percentage of the maximum PRC per meter (ie the full meter asset and installation costs that would be due if a new meter was replaced immediately).

1.5 Each profile runs from 100% at the age zero bracket to 0% at the PRC age. For example, for a 10 year PRC age assumption, the profile is 0% at the 10 year age bracket. This reflects that meters in the 10 year age bracket are at least 10 years old, and therefore past the date at which PRCs stop applying. We have refined our approach to looking at how PRCs vary with the meter age after stakeholder feedback following our August 2021 decision.

1.6 We assume that meters are replaced randomly during the smart meter rollout – ie that the likelihood of a meter being replaced does not depend on its age. The total PRCs at a given age will therefore depend not only on the PRC per meter of

individual meters at that age, but also on the number of meters at that age. We multiply each profile by the number of meters in each age bracket. For example, for a 10 year PRC age assumption, we multiply the number of meters at age 0 with 100%, the number of meters at age 1 with 90%, and so on till we reach multiplying the number of meters at age 10 with 0%. For each profile, we therefore have an implied total PRC cost for each age bracket. We normalise the maximum PRC per meter to 1, as the total PRC costs are only an intermediate step to calculating a cumulative profile in percentage terms. This means that we are only interested in how PRCs build up with the meter age in relative rather than absolute terms.

1.7 For each profile, we calculate the total implied PRC cost across all age brackets. We then calculate the total PRC cost in each age bracket as a percentage of this overall total. Using this, we can calculate a cumulative profile for total PRCs across meter ages, for each PRC age assumption.

Cumulative profile for total PRCs, using RFI data

1.8 We have RFI data on the total value of PRCs in each age bracket. These total figures incorporate both the factors mentioned above – PRCs varying with meter age and different numbers of meters at each age.

1.9 We calculate the total PRC across all the age brackets. We then calculate the total PRC cost in each age bracket as a percentage of the overall total. We can then calculate a cumulative profile for total PRCs, based on the RFI data.

Comparing the two profiles

1.10 We want to understand which assumption aligns best to the RFI data, so we compare each cumulative profile based on a different PRC age assumption to the cumulative profile based on the RFI data.

1.11 To do this, for each assumption, we calculate the difference in each age bracket between the cumulative profile for that assumption and the cumulative profile based on the RFI data. We then square each difference and take the total of the squared differences for each assumption's cumulative profile.

1.12 We deem that the assumption with the smallest total squared difference is most closely aligned with the RFI data.

1.13 Unlike for the meter asset life analysis, we do not need to round the result further. This is because we are testing and selecting from several PRC age assumptions which are already whole numbers.

Appendix 12 – Additional model updates

Calculation issue for COVID-19 adjustment

1.1 One supplier's economic adviser said that there was an error in our calculation of the number of traditional gas PPMs expiring in 2021. This was due to a reference to an empty cell, rather than the cell containing the COVID-19 parameter for PPM for 2021.

1.2 We have decided to correct this error. This issue was specific to a particular cell in the calculation – it did not affect the number of expiring meters for other meter types or years.

1.3 This change increased the gas PPM SMNCC slightly. The cap period eight gas PPM SMNCC rose by £0.87.

Traditional electricity PPM meter rental uplift

1.4 We use the meter rental uplift to adjust our modelled approach to metering costs, taking into account data on suppliers' meter rental charges.[74]

1.5 The meter rental uplift is an approximation, so we do not apply one in all cases. We do not use one where there would only be a small difference between the modelled approach and the meter rental charge data.[75]

1.6 In our October 2021 consultation model (and previous versions), we applied a meter rental uplift for gas PPM, but set this to zero for electricity PPM.

1.7 As set out in Chapter 2, we have decided to increase the amortisation period for PPM. This reduces annual costs in the modelled approach, as asset and installation

[74] For an explanation of our approach to the meter rental uplift (in the context of the credit SMNCC, but also applicable to the PPM SMNCC), see: Ofgem (2020), Technical annex to reviewing smart metering costs in the default tariff cap: August 2020 decision, paragraphs 3.50 to 3.53. https://www.ofgem.gov.uk/publications/decision-reviewing-smart-metering-costs-default-tariff-cap

[75] Ofgem (2020), Technical annex to reviewing smart metering costs in the default tariff cap: August 2020 decision, paragraphs 3.54 to 3.56. https://www.ofgem.gov.uk/publications/decision-reviewing-smart-metering-costs-default-tariff-cap

costs are spread over more years. This in turn increases the difference between the modelled approach and the meter rental charge data.

1.8 In principle, the electricity PPM meter rental uplift would now be sufficiently large that we would include it (ie not set it to zero).

1.9 However, we have decided to maintain the electricity PPM meter rental uplift at zero for this decision, in line with the October 2021 consultation model. This is because stakeholders have not had the opportunity to comment on changing this meter rental uplift. We intend to consult on applying a non-zero meter rental uplift for electricity PPM as part of our next annual review.

Calculation issue for PPM advanced payments

1.10 We have noticed a minor calculation issue in the calculation of PPM advanced payments.

1.11 The PPM SMNCC value to use when calculating advanced payments is after applying the PPM cost offset. As we only offset PPM costs until the SMNCC is zero, the formula in the October 2021 consultation SMNCC model tries to implement this by capping the SMNCC to use at zero.

1.12 However, this does not take account of the case where the calculated SMNCC (pre-offset) is positive (ie already above zero). In this case, we should use the calculated SMNCC, rather than capping this at zero.

1.13 Given this is a straightforward calculation issue, we have decided to correct this as part of this February 2022 decision.

1.14 This is for completeness only. In our revised SMNCC model, the PPM SMNCC values are negative for all cap periods which feed into the calculation of advanced payments. This calculation issue therefore has no impact on the PPM SMNCC at present. There could however be an impact when we calculate advanced payments in future annual reviews, in the event that the calculated PPM SMNCC is positive for any cap period feeding into the calculation of advanced payments.

1.15 We only apply a cost offset to PPM, so there is also no impact on the credit SMNCC.

Appendix 13 – Additional considerations on advanced payments

The principle of advanced payments

1.1 One supplier's economic adviser stated that, if advanced payments reduce the SMNCC, this means the cap is below the efficient cost of supplying customers we have calculated for that period. It stated that this acts as a disincentive for companies to grow their customer base because they are unable to recover full costs.

1.2 We do not agree that advanced payments would affect suppliers' incentives to grow their customer base. Suppliers would normally use fixed tariffs to acquire customers, rather than standard variable tariffs (SVTs) priced at the cap level. In addition, the SMNCC is only one element of the cap. It therefore does not determine how the cap level relates to suppliers' efficient costs.

1.3 The aim of the advanced payments adjustment is to consider the cumulative costs and the cumulative allowances across cap periods. Our key consideration is not matching costs and funding in particular cap periods.[76]

1.4 The supplier's economic adviser also stated that if advanced payments increase the SMNCC, then this means that the cap is above our estimate of the efficient cost of supplying customers in that period. It stated that the ability for suppliers to capture this margin is eroded by competition – a dynamic that it stated is likely to be amplified by a potential future fall in the gas price.

1.5 As noted above, we are not seeking to match costs and funding in particular cap periods.

1.6 From our monitoring of prices in the retail market, we know that most SVTs have been priced around the cap since it was put in place. The average SVT amongst large legacy suppliers almost exactly follows the cap. While the average SVT of

[76] We considered the point on suppliers' ability to recover their efficient costs in the August 2021 credit decision.
Ofgem (2021), Price Cap - Decision on credit SMNCC allowance, Appendix 12, paragraph 1.17.
https://www.ofgem.gov.uk/publications/price-cap-decision-credit-smncc-allowance

other suppliers has not followed the cap as closely, it has still consistently followed the increases and decreases in the cap level.[77] We have not seen any evidence that the increases in the cap level are passed on to customers to a lesser extent than decreases in the cap level. We therefore do not consider that the ability of suppliers to capture increases in the SMNCC would be eroded by competition. It is also too early to conclude that this would change due to hypothetical falling gas prices.

1.7 One supplier stated that we would only apply advanced payments if it is a negative amount.

1.8 This is a misunderstanding of our advanced payments adjustment. We would apply it regardless of whether its calculated value is positive or negative. We would correct for both over and underfunding of suppliers.

1.9 One supplier's economic adviser said that we should ensure that we got the right SMNCC calculation the first time around, rather than relying on "an unreliable true-up". There are challenges with knowing upfront what smart metering costs suppliers will incur, especially given that rollout can vary from expectations. Taking advanced payments into account improves the overall accuracy of the SMNCC.

Impact of customer churn on rollout profiles

1.10 One supplier's economic adviser stated that suppliers covering at least 6% of the domestic market have failed in the period between 1 July and 31 October 2021. The supplier stated that, as our calculation of advanced payments for credit is based on the market leading supplier's rollout profile, it is sensitive to the smart meter rollout achieved by the market leader. The supplier stated that, if the market leader has acquired customers through the SoLR process, then these customers are likely to have had a lower smart meter rollout. Its new combined portfolio would therefore show a lower smart meter rollout (than before taking on customers through the SoLR process).

[77] Ofgem (2021), Prices and profits, 'Retail price comparison by company and tariff type: Domestic (GB)'. https://www.ofgem.gov.uk/retail-market-indicators

1.11 We are not updating the credit or PPM rollout profiles for cap period eight, so these are not relevant considerations for cap period eight. However, we will consider the stakeholder's points for cap period nine.

1.12 This feedback solely relates to advanced payments, and not to the rollout profiles which we use to set the SMNCC allowance in future cap periods. If the supplier(s) used to set the rollout profile have more smart meters left to install in future years as a result of taking on customers through the SoLR process, then this will be reflected in the rollout profile and consequently in the SMNCC.[78]

[78] The market leader supplier for credit, and the suppliers used to calculate the market average for PPM.