

Review of the Energy Market Investigation (Prepayment Charge Restriction) Order 2016

Provisional Decision

7 June 2019

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The Competition and Markets Authority has excluded from this published version of the market study report information which it considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [≫]. [Some numbers have been replaced by a range. These are shown in square brackets.] [Non-sensitive wording is also indicated in square brackets.] Members of the Competition and Markets Authority who conducted this review:

Kip Meek *(Chair of the Group)* Paul Muysert Claire Whyley

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Executive Summary

- The Energy Market Investigation (Prepayment Charge Restriction) Order 2016 (the Order) established the Prepayment Charge Restriction (PCR), the aims of which were:
 - *(a)* reducing consumer detriment from high prices¹ by reducing prices paid by prepayment customers;
 - *(b)* allowing a notional efficient supplier in a steady state to earn a normal rate of return;² and
 - *(c)* allowing for competition to develop among prepayment suppliers below the level of the PCR.
- 2. The PCR was a temporary measure intended to remain in place until the end of 2020, by which time the CMA had expected the roll-out of smart meters to be substantially completed. The completed roll-out of smart meters was intended to offer greater ease of switching for customers and to drive increased competition for and engagement by prepayment customers.
- 3. We launched a mid-term review of the Order on 31 January 2019, and within it, we have explored four potential changes of circumstance:
 - *(a)* whether conditions of competition have changed in the prepayment segments of the domestic energy markets;
 - *(b)* the speed and scale of smart meter roll-out at present, assessed against the extent of the roll-out expected by the end of 2020;
 - (c) the introduction by Ofgem of the Default Tariff Cap (DTC), taking into consideration the risk of unintended consequences on competition, consumers and the smart meter roll-out programme arising from the coexistence in the retail energy markets of two charge restrictions with different methodologies and underlying data; and
 - (*d*) changes to the costs faced by energy suppliers in supplying prepayment meter customers relative to the costs underpinning the level of the PCR.

¹ This consumer detriment arose from two adverse effects on competition arising from (a) domestic weak customer response in all domestic retail energy markets, and (b) certain features that were particular to the prepayment segments, further described in Chapter 1 below.

² The CMA found, for the purpose of constructing a competitive benchmark, that such a notional efficient supplier would earn an EBIT of 1.25% of sales if pricing the supply of energy in the prepayment segments at the level of the PCR. It considered this to represent a normal rate of return which would entail a return on capital employed in line with the cost of capital.

- 4. We have provisionally concluded the following:
 - (a) The conditions of competition in the prepayment segments have not improved materially since the introduction of the PCR, and levels of overall engagement among prepayment customers are still low. As a consequence, this does not amount to a change of circumstance.
 - *(b)* The roll-out of smart meters has not progressed in line with the initial projections on which the EMI Final Report was premised. Evidence shows that it is not on track to complete by the end of 2020 and we believe may be as much as two years behind schedule.³ Consequently, there will be a significant proportion of prepayment customers without a smart meter at the time the PCR expires on 31 December 2020, when the roll-out was expected to be substantially complete. Accordingly, we have provisionally found that the delay to the roll-out programme for smart meters is significant and represents a relevant change of circumstance.
 - (c) While we are aware that the DTC has only been in place since January 2019, we have not seen evidence that the co-existence of the PCR and DTC in separate segments of the markets has significantly affected the incentives of either suppliers or customers. Accordingly, our provisional finding is that the co-existence of the PCR and DTC does not amount to a change of circumstance.
 - (d) However, the introduction of the DTC is relevant for assessing the accuracy of the PCR, whether there have been any material changes in costs since the introduction of the PCR and whether, by reason of any change of circumstance, the PCR no longer remains appropriate and needs varying; and accordingly, the scope and magnitude of any such variation.
 - (e) Some of the costs that an efficient supplier is expected to bear in supplying prepayment customers have increased to a level materially higher than that reflected in the PCR methodology. There are two categories of cost where, due to changes since its design and introduction, the PCR is underestimating costs incurred which, together, amount to a change of circumstance:
 - (i) policy costs have changed since the design of the PCR such that there is a downward bias in the PCR due to the difference between the OBR forecasts and out-turn for the base year, and we have found

³ This is discussed in Chapter 2 below.

the DTC to be a more accurate estimate of policy costs than the PCR; and

- (ii) pass-through smart metering costs have changed since the design of the PCR such that these have increased to a level materially higher than the level allowed for in the PCR.
- 5. As a result of the change of circumstance relating to policy and pass-through smart metering costs, our provisional conclusion is that the PCR is no longer effective in meeting all of its aims, due to underestimating the costs incurred by efficient suppliers. While we consider the PCR has been meeting its principal aim of mitigating consumer detriment, we note that, where the PCR was set too low, this would present the risk that suppliers reduce service levels to prepayment customers, competition is materially reduced, and suppliers may be forced to exit the market. Taken together, we consider that this means that the Order is no longer appropriate and needs to be varied.
- 6. We explored two options for reform of the Order, the first involving adopting Ofgem's DTC methodology and adjusting it to reflect the specific costs in supplying prepayment customers, and the second involving a hybrid approach of the current PCR methodology with calculations for policy and pass-through smart metering costs taken from Ofgem's DTC methodology.
- 7. We provisionally conclude that, on balance, the most effective way to vary the Order is to adopt Ofgem's DTC methodology. In reaching this provisional conclusion, we considered in particular the relative accuracy, the practicability and the impact of each option on prepayment customers and suppliers.
- 8. Our provisional decision is to vary the Order to adopt Ofgem's DTC methodology, adjusted to reflect the specific costs in supplying prepayment customers. We have also provisionally decided to make a recommendation to the Gas and Electricity Markets Authority (GEMA) to continue protection for prepayment customers after the expiry of the PCR due to the slow roll-out of smart meters.
- 9. We aim to adopt a final decision in time for this change in methodology to be applied in calculating the level of the PCR in the next charge restriction period (October 2019 to March 2020).
- 10. Given that our proposed variation of the PCR would involve amending the Gas Supplier Standard Licence Conditions and the Electricity Supply Standard Licence Conditions, pursuant to section 168, paragraphs (2) and (7) of the EA02 we have had regard to the statutory functions of GEMA as well as to those matters to which GEMA may have regard by virtue of section 4AA(4) of the Gas Act 1986 and section 3A(4) of the Electricity Act 1989, and

provisionally concluded that the proposed amendments would be reasonable and practical for the purpose set out in section 168 of the EA02.

- 11. We are now consulting on this provisional decision and the following supporting documents:
 - (a) a Notice of Intention to Vary the Order;
 - (b) the draft Variation Order, which would vary the Order, including its annexes;
 - *(c)* the draft Explanatory Note that would replace the original Explanatory Note to the Order; and
 - (d) the model that would replace the CMA's original PCR model.
- We are interested in receiving views from stakeholders concerning this provisional decision, including and referring to evidence where appropriate. Responses should be sent to the following address and should arrive by 8 July 2019.

remedies.reviews@cma.gov.uk

OR:

Energy Prepayment Review Competition and Markets Authority Victoria House (6th Floor South East) Southampton Row London WC1B 4AD

13. Following this consultation, we will consider the responses received and the evidence and views presented and will assess the impact of those responses on this provisional decision before reaching a final decision.

1. Introduction and background

- 1.1 The CMA launched its review of the Order on 31 January 2019. The Order, which gave effect to the PCR, was made following the CMA's market investigation into the energy markets in Great Britain which concluded in 2016.
- 1.2 The CMA has a statutory duty under section 162 of the Enterprise Act 2002 (EA02) to keep under review orders from its investigations. In this review, we have considered whether, by reason of any change of circumstance, the Order is no longer appropriate and needs to be varied or revoked.

The CMA's energy market investigation

- 1.3 On 24 June 2016, following a market investigation into the energy markets in Great Britain (EMI), the CMA published its findings in a report under section 136 of the EA02 entitled *Energy market investigation: Final report* (EMI Final Report). In the EMI Final Report, the CMA found that a combination of features of the energy markets gave rise to a number of adverse effects on competition (AECs) and associated detriment.
- 1.4 Two of the AECs identified by the CMA in the EMI Final Report were the Domestic Weak Customer Response AEC and the Prepayment AEC.
- 1.5 The combination of features identified by the CMA as giving rise to the Domestic Weak Customer Response AEC were the following:⁴
 - (a) Customers have limited awareness of, and interest in, their ability to switch energy supplier, which arises in particular from the following fundamental characteristics of the domestic retail gas and electricity supply markets: (i) the homogeneous nature of gas and electricity; and (ii) the role of traditional meters and bills.
 - (b) Customers face actual and perceived barriers to accessing and assessing information arising, in particular, from the following aspects of the domestic retail gas and electricity markets: (i) the complex information provided in bills and the structure of tariffs; and (ii) a lack of confidence in, and access to, price comparison websites (PCWs) by certain categories of customers, including the less well-educated and the less well-off.

⁴ The adverse effects on competition in the domestic retail market were outlined in Chapter 9 of the EMI Final Report.

- (c) Customers face actual and perceived barriers to switching, such as where they experience erroneous transfers which have the potential to cause material detriment to those who suffer from them.
- 1.6 In addition, the CMA found that there are additional aspects of the prepayment meter segments that contribute to the features of the Domestic Weak Customer Response AEC. In particular, the CMA found that prepayment customers faced:
 - (a) higher actual and perceived barriers to accessing and assessing information about switching arising, in particular, from relatively low access to the internet and confidence in using PCWs; and
 - (b) higher actual and perceived barriers to switching arising, in particular, from: (i) the need to change meter to switch to a wider range of tariffs (and the obstacles associated with this requirement such as perceptions of the complexity of the meter replacement process); and (ii) restrictions arising from the Debt Assignment Protocol hindering indebted prepayment customers' ability to switch supplier.
- 1.7 The features identified by the CMA as giving rise to the Prepayment AEC were the following:
 - *(a)* technical constraints that limit the ability of all suppliers, and in particular new entrants, to compete to acquire prepayment customers, and to innovate by offering tariff structures that meet demand from prepayment customers who do not have a smart meter; and
 - (b) softened incentives on all suppliers, and in particular new entrants, to compete to acquire prepayment customers due to: (i) actual and perceived higher costs to engage with, and acquire, prepayment customers compared with other customers; and (ii) a low prospect of successfully completing the switch of indebted customers, who represent about 7 to 10% of prepayment customers.
- 1.8 The CMA decided on a package of remedies to remedy, mitigate or prevent the AECs and/or associated detriment that it had found. This package included the PCR for the tariffs made available (either directly or indirectly) or applied to domestic customers on prepayment meters by energy suppliers. Section 14 of the EMI Final Report set out the details of the proposed PCR.⁵ On 7 December 2016, the CMA adopted the Order giving effect to the PCR.

⁵ See page 1020 of the EMI Final Report.

The Order

- 1.9 The main provisions of the Order are set out in Clauses 1, 3 and 5 to 7. The provisions include:
 - (a) the temporal scope of the PCR (Clause 1);
 - (b) a supplier compliance obligation (Clause 3);
 - (c) a supplier reporting obligation (Clause 5); and
 - (d) monitoring and enforcement provisions (Clauses 6-7).

Purpose of the Order

- 1.10 The Order is designed to give effect to one of the remedies set out in the EMI Final Report, namely the requirement on suppliers to ensure that the annual bills paid by prepayment customers do not exceed a specified cap for a period until the end of 2020.⁶
- 1.11 The EMI Final Report set out the specific customer detriment which the PCR was designed to address, namely the detriment arising from the Prepayment AEC and the Domestic Weak Customer Response AEC, until the roll-out of smart meters is substantially complete. At the time of the EMI Final Report, the Government target was for this to be substantially completed by the end of 2020.
- 1.12 It was clear in the EMI Final Report that the PCR would be a transitional measure, closely linked to the roll-out of smart meters,⁷ noting that the features that gave rise to the Prepayment AEC would be, to a significant extent, addressed once a large majority of prepayment customers had a smart meter in place.⁸ Specifically, the CMA expected that, once the roll-out of smart meters was substantially complete, this would have given suppliers greater incentives to compete more effectively for new prepayment customers, as customers would find it easier to switch tariff, supplier and payment method with a smart meter, with customers having more options available. As a result, the CMA envisaged that as competition and

⁶ See paragraph 20.24(k) of the Order.

⁷ There are two types of smart meters, SMETS1 and SMETS2. SMETS1 meters are capable of being interoperable when enrolled into the DCC network. SMETS2 meters are interoperable from their installation. SMETS1 meters are forecast to be enrolled in the DCC network from the end of May 2019 in three phases.
⁸ The EMI Final Report, paragraphs 14.26 – 14.28.

prepayment customers' engagement levels increased, the detriment suffered would fall.⁹

1.13 For the purposes of the Order and this review, the CMA considered that smart meters include SMETS2 smart meters, and those SMETS1 smart meters that have been enrolled into the central infrastructure such that they are interoperable across different suppliers.¹⁰ This means that the scope of the PCR includes customers with traditional dumb meters as well as SMETS1 smart meters that are yet to become interoperable.

Temporal scope of the Order and PCR

- 1.14 The retail energy suppliers operating in Great Britain affected by the Order are required to comply with the terms of the Order from 8 December 2016 until 30 June 2021, or until such time as it is varied or revoked under the EA02.
- 1.15 The PCR came into force on 1 April 2017 and, pursuant to Article 3.4 of the Order, will cease to have effect on 31 December 2020.

The PCR

- 1.16 The Order requires retail energy suppliers to ensure that the aggregate amounts of all charges for gas and electricity to retail prepayment customers do not exceed the relevant maximum charges calculated in accordance with the Order for each charge restriction period.¹¹
- 1.17 Retail energy suppliers are required to adhere to these obligations in accordance with specific electricity and gas supply licence conditions, as set out in section 28A of the Electricity Licence Conditions and the Gas Licence Conditions respectively.

Reviewing the Order

Legal framework

1.18 The CMA has a statutory duty to keep under review undertakings and Orders made under section 162 of the EA02. From time to time, the CMA must

⁹ See paragraph 14.330 of the EMI Final Report.

¹⁰ This issue is considered further in Chapter 2.

¹¹ These obligations are set out in Clauses 3.1 and 3.2 of the Order. The details for determining the relevant maximum charges and benchmark maximum charges for charge restriction periods for electricity and gas are set out in Schedules 1 and 2 of the Order respectively, in accordance with Clause 3.3 of the Order.

consider whether, by reason of any changes of circumstance any Order is no longer appropriate and needs to be varied or revoked.¹²

Reasons for launching the review

- 1.19 The EMI Final Report proposed for the Order to be subject to a mid-term review, commencing in January 2019 concerning the progress made in the roll-out of smart meters in Great Britain.¹³ During its Invitation to Comment on the proposed review, the CMA considered whether to extend the scope of the review beyond the assessment of the progress in the roll-out of smart meters.
- 1.20 On 19 July 2018, the Domestic Gas and Electricity (Tariff Cap) Act 2018 came into force. This legislation required the introduction of a temporary tariff cap for customers on standard variable and default tariffs. Consequently, on 6 November 2018, Ofgem announced it would introduce a charge restriction, the DTC, from 1 January 2019.
- 1.21 In the light of developments including the pace of smart meter roll-out and the introduction of the default tariff cap, on 18 December 2018 the CMA consulted on a proposed review to assess whether by reason of any changes of circumstance the Order was no longer appropriate and needed to be varied or revoked.
- 1.22 On the basis of the information available to the CMA, the CMA decided on 31 January 2019 that there was a reasonable prospect of a review finding at least one change of circumstance, and that launching a review at this time represented a strategic priority for the CMA.¹⁴
- 1.23 Following the launch of the review, the CMA appointed three panel members (Kip Meek (Chair), Paul Muysert and Claire Whyley) to oversee and decide upon the review.

¹² See EA02 Section 162 and Remedies: Guidance on the CMA's approach to the variation and termination of merger, monopoly and market undertakings and orders (CMA11), paragraph 2.2.

¹³ See paragraph 14.337 of the EMI Final Report.

¹⁴ See CMA Decision to launch the review.

Introduction

- 2.1 We have considered whether there have been any changes of circumstance since the EMI Final Report that are relevant for the purposes of assessing, pursuant to section 162 of the EA02, whether the Order is no longer appropriate and needs to be varied or revoked. In the Issues Statement for this review, we set out two possible changes of circumstance that we expected to explore.
- 2.2 During the course of this review, and as a result of considering material provided by respondents, we have also considered evidence relating to other potential changes of circumstance that may be relevant to the assessment under section 162 of the EA02.
- 2.3 Consequently, the four potentially relevant changes of circumstance that we explore in this Chapter are:
 - *(a)* whether conditions of competition in the prepayment segments of the domestic energy markets have changed;
 - *(b)* the speed and scale of smart meter roll-out at present, assessed against the extent of the roll-out expected by the end of 2020;
 - (c) the introduction by Ofgem of the DTC, taking into consideration the risk of unintended consequences on competition, consumers and the smart meter roll-out programme arising from the co-existence in the retail energy markets of two charge restrictions with different methodologies and underlying data; and
 - *(d)* changes to the costs faced by energy suppliers in supplying prepayment meter customers relative to the cost components underpinning the level of the PCR.
- 2.4 Below we first assess the nature of any potentially relevant changes of circumstance and then in Chapter 3 assess whether, by reason of any changes of circumstance, the Order specifying the PCR is no longer appropriate in meeting all its aims and needs to be varied or revoked.

Changes in market conditions

2.5 As part of the assessment of the case for the PCR, and as set out in the EMI Final Report, the CMA assessed the scale of the detriment across all the domestic energy markets. It concluded that: '[T]he customer detriment associated with high prices was approximately £1.4 billion a year on average for the period 2012 to 2015 with an upwards trend. We have also found evidence that is indicative of harm to customers from poor quality of service and restrictions on innovation. However, we note that by its nature this type of harm is less readily quantifiable.'¹⁵

- 2.6 In relation to prepayment customers, the EMI Final Report found that detriment for prepayment customers was increasing, and this was estimated to be £388 million a year across all prepayment customers.¹⁶
- 2.7 In the EMI, the CMA noted that its prepayment and engagement remedies would help improve the conditions for competition in the prepayment segments to generate benefits for customers, but that these would take some time to implement and would not fully address the detriment until the roll-out of smart meters had been substantially completed.
- 2.8 As part of this review, we have assessed whether competition in the prepayment segments of the energy markets has improved sufficiently for the PCR to no longer be necessary to remedy the relevant features and adverse effects on competition identified in the EMI Final Report. In this assessment, we drew on the following sources:
 - (a) Sections 8 and 9, and Appendix 9.7 of the EMI Final Report for information on the relevant market conditions in 2015;
 - *(b)* Ofgem's State of the Market report,¹⁷ information requested from Ofgem and desktop research to gather latest evidence on key market indicators; and
 - (c) stakeholders' submissions.
- 2.9 We have looked at relevant market indicators in the prepayment segments and considered the extent to which these have changed since 2015, taking into account the impact of the CMA's remedies to reduce barriers to switching and supply-side barriers to competition that were implemented as a result of the EMI, as well as evidence on tariffs and prepayment customers switching to other payment methods.

¹⁵ EMI Final Report paragraph 10.133.

¹⁶ EMI Final Report paragraphs 14.16 to 14.18.

¹⁷ Ofgem, State of the Energy Market Report, 2018.

- 2.10 Our assessment indicates that there has been no material improvement in the state of competition in the prepayment segments since the PCR was introduced. In particular:
 - (a) Utilita continues to be the only specialist supplier in the prepayment segments with a material share. While its share of customers in the prepayment segments has increased since the EMI Final Report to approximately 16%, the net prepayment customer account losses for the Six Large Energy Firms (SLEFs)¹⁸ have declined and the net gains for prepayment specialist suppliers¹⁹ have reduced since the introduction of the PCR, suggesting that customer switching within the prepayment segments may have reduced.²⁰ In March 2018,²¹ the prepayment specialists recorded net customer account losses in the electricity segment.
 - *(b)* We have observed lower price dispersion in the prepayment segments, which we attribute to suppliers reducing high tariffs to comply with the PCR. We note that there are still some tariffs that are below the PCR level but that these are mostly offered by smaller suppliers.²² According to Ofgem's State of the Market Report, over 90% of prepayment customers are on tariffs close to the cap.²³
 - (c) The EMI Final Report observed that the proportion of customers on prepayment meters had increased steadily over the years, doubling between 1996 and 2015, from 7% to about 16%.²⁴ The proportion of prepayment customers has remained broadly unchanged since 2015.²⁵ In view of this, together with the evidence of delays in the roll-out of smart meters, it is unlikely that there has been a material increase in switching to credit meters since the PCR was introduced.

Provisional finding on market conditions

2.11 Based on the above, our provisional finding is that the conditions of competition in the prepayment segments have not improved significantly since the introduction of the PCR and that levels of overall engagement among

¹⁸ These are Centrica, EDF Energy, E.ON, npower, Scottish Power, and SSE.

¹⁹ Prepayment specialists, as defined by Ofgem, are: Utilita, OVO, E, Economy Energy, Eversmart Energy, Our Power, Spark and Toto.

²⁰ Ofgem, State of the Energy Market Report, 2018.

²¹ The latest month for which data is available.

²² Ofgem, State of the Energy Market Report 2018, page 33.

²³ Ofgem, State of the Energy Market Report 2018, page 35.

²⁴ EMI Final Report paragraph 103.

²⁵ According to the State of the Energy Market report 2018 (p. 32), there are currently approximately 4 million customers on prepayment meters, representing around 16% of total customers in GB. This is broadly similar to the share of prepayment customers in 2015 (EMI Report, paragraph 8.130).

prepayment customers are still low and, therefore, do not amount to a change of circumstance.

Smart meters

Initial target

- 2.12 The PCR was established as a temporary measure, until the end of 2020 when smart meter roll-out was expected to be substantially complete. The CMA expected that, by that time, competition for prepayment customers would have improved²⁶ so that prepayment customers would no longer suffer detriment from limited competition and engagement to such an extent as to justify the PCR. The CMA noted however that, if the roll-out of smart meters did not appear likely to be completed by 31 December 2020, it would consider whether to encourage GEMA to review the situation and take action.²⁷
- 2.13 In this review, we have assessed the progress of the roll-out of smart meters, compared to initial forecasts for the programme, considering evidence from a range of sources, including the National Audit Office (NAO) report into the roll-out of smart meters (the NAO Report)²⁸ and views of industry stakeholders.
- 2.14 The EMI Final Report set out the Government target for the implementation phase of smart meter roll-out. This target expected near universal roll-out of smart meters by the end of 2020.²⁹ It was envisaged that the roll-out phase would commence in the second half of 2016, when the Data Communications Company (DCC) was scheduled to commence operation.³⁰
- 2.15 For the purposes of the PCR, smart meters comprise SMETS2 smart meters and installed SMETS1 smart meters that have become interoperable across suppliers. Currently, many SMETS1 smart meters do not meet that definition because, due to the delay in the DCC infrastructure, they are not yet interoperable. Enrolment into the DCC infrastructure will take place in three phases through 2019.³¹ It will take additional time for that functionality to be used by SMETS1 smart meters. The Department for Business, Energy and

²⁶ As a result of the CMA's other remedies promoting consumer engagement and of the greater functionality of SMETS2 smart meters.

²⁷ See EMI Final Report, paragraphs 14.334 and 14.338.

²⁸ NAO, Rolling out smart meters, 23 November 2018, HC 1680.

²⁹ EMI Final Report, Appendix 8.4 'Smart meter roll-out in Great Britain', paragraphs 5 and 12.

³⁰ The NAO Report, paragraph 1.15. The DCC is a company set up to act as the central communications infrastructure for the operation of smart meters. The implementation of the DCC was delayed until November 2016, two and a half years later than the government's initial plans in 2011, and 13 months later than it assumed in the 2013 full business case. Prepayment functionality only became supported from July 2017.
³¹ See DCC website.

Industrial Strategy (BEIS) expects SMETS1 smart meters to become interoperable by the end of 2020.

Progress and forecast for 2020

- 2.16 We have carefully considered the findings in the NAO Report, most notably that the progress of the roll-out programme was significantly behind the original targets for the scheme. The NAO said that, 'there [was] no realistic prospect of installing smart meters in all eligible premises covered by the rollout obligation by 2020',³² and reported suppliers' views that they would only be able to install smart meters in approximately 70-75% of homes and small businesses by the end of 2020.33
- The quarterly report on the progress of roll-out, published by BEIS, supports 2.17 the NAO's prediction.³⁴ In Q4 2018, this found that:
 - (a) around 16 million smart and advanced meters³⁵ had been installed;
 - (b) there were around 13.8 million smart and advanced meters in operation;
 - (c) circa 25% of all domestic meters operated by large energy suppliers are operating in smart mode;³⁶ and
 - (d) as at 31 December 2018, around 240,000 gas and electricity domestic SMETS2 smart meters had been connected to the DCC system.³⁷
- 2.18 Figure 1 below shows that roll-out is behind the planned schedule.

³² NAO report, paragraph 1.36.

³³ NAO report, paragraph 1.36.

³⁴ To access the BEIS data see BEIS website.

³⁵ This number includes SMETS1 smart meters, SMETS2 smart meters and advanced meters. For an explanation of the term "Advanced meter", please see BEIS report, page 8. "Advanced meters must, at a minimum, be able to store half-hourly electricity and hourly gas data, to which the customer can have timely access and the supplier has remote access. However, meters described as "advanced" in this report may have additional functions found in a smart meter that meets the Government's technical specifications."

³⁶ This number includes both SMETS1 and SMETS2 smart meters operating with smart functionality. However, at the time of writing, only SMETS2 smart meters are interoperable across suppliers. SMETS1 smart meters will gain this capability when enrolled into the DCC network. ³⁷ BEIS, Statistical release and data: Smart Meters, Great Britain, Q4 2018, page 12.

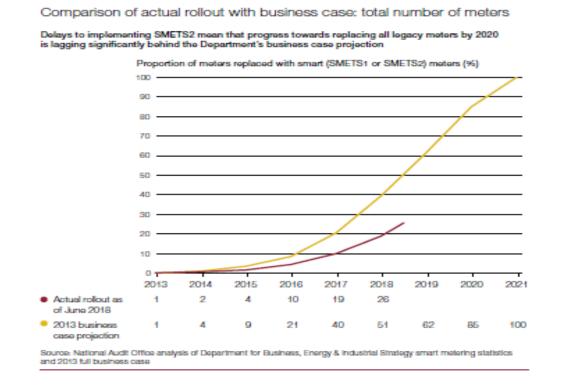


Figure 1: Comparison of actual roll-out with Government business case

- 2.19 As shown in Figure 1 above, the forecast was that by the middle of 2018, smart meters should have been rolled out to 50% of customers. As shown, approximately half that proportion has been installed by this point. Based on this progress, and discussions with a number of suppliers, including one that provided an estimate for its future roll-out work, we note that it is difficult to forecast how the rollout of smart meters will progress in the coming months and years. Despite this challenge in forecasting, we believe that the roll-out programme is not on track to complete by the end of 2020 and may be as much as two years behind schedule.
- 2.20 This view is supplemented by evidence provided by suppliers to our review. One indicated that, subject to the existence of a fit-for-purpose DCC system, it was aiming to have installed DCC-compliant smart meters³⁸ in approximately 50% of its customers' properties by the end of 2020.

Factors contributing to delay in the roll-out of smart meters

2.21 We have received evidence of the factors that may be contributing to the delay:

³⁸ SMETS2 standard and upgraded interoperable SMETS1 meters.

- *(a)* **Delays to the DCC infrastructure.** This has suffered from both delays in procurement from the increased complexity of specifications; as well as problems with the infrastructure in certain parts of the country, largely due to barriers to physical connectivity; and the technological readiness of SMETS1 and SMETS2 smart meters.³⁹
- (b) Technological readiness of SMETS1 and SMETS2 smart meters. While SMETS2 smart meters for credit customers have been operational since July 2017, a technical solution which would allow SMETS2 smart meters to be used as prepayment meters only became available in March 2019 due to a number of issues including some communications issues.⁴⁰
- (c) The NAO highlighted possible consumer resistance to smart meters. The NAO recognised that early adopters may have been more willing to have a smart meter installed than other consumers, with it being possible that, ultimately, some consumers may be reluctant or refuse to have a smart meter installed.⁴¹
- 2.22 In addition, due to the delays to the DCC and the roll-out of SMETS2 smart meters, SMETS1 smart meters were installed for a longer period and in greater volumes than expected. The current intention is for SMETS1 smart meters to have functionality installed in three phases during the course of 2019 and to become interoperable by the end of 2020, as noted above.

Provisional finding on the delay to roll-out of smart meters

- 2.23 Several factors, set out above, have meant that roll-out of smart meters has not progressed in line with the initial projections on which the EMI Final Report was premised (including the decision for the PCR to cease to have effect by the end of 2020). Evidence shows that it is not on track to be complete by the end of 2020 and at present, we believe may be as much as two years behind schedule. Consequently, there will be a significant proportion of prepayment customers without a smart meter at the time the PCR expires on 31 December 2020, when the roll-out was expected to be substantially complete.
- 2.24 Accordingly, we have provisionally found that the delay to the roll-out programme for smart meters is significant and represents a relevant change of circumstance. We consider in Chapter 3 below whether, by reason of this

³⁹ NAO Report, paragraphs 1.15 - 1.18.

⁴⁰ Two specific technological challenges were highlighted by the NAO Report, both of which concerned the technology by which these meters communicated with the DCC network.

⁴¹ See the NAO Report, 1.19 – 1.20. In addition, research carried out by Smart Energy GB suggested that around 30% of consumers would decline a smart meter when offered.

change of circumstance, the Order is no longer appropriate and should be varied or revoked.

Introduction of Ofgem's DTC

- 2.25 The Domestic Gas and Electricity Act 2018 (Tariff Cap Act 2018) created a duty on Ofgem to introduce a temporary price cap for customers on Standard Variable Tariffs (SVT) and default tariffs as soon as was practicable. The price cap introduced as a result was the DTC.⁴²
- 2.26 The DTC came into force on 1 January 2019 and covers customers on standard variable and default tariffs. It is designed so that it does not overlap with the PCR, as customers within the scope of the PCR are excluded from the DTC.
- 2.27 As set out in the EMI Final Report,⁴³ the CMA considered different options for the structure and form of the PCR, including approaches based on bottom-up cost modelling (which was subsequently used by Ofgem for the DTC) and the hybrid reference price and cost index approach (which was adopted for the PCR). In relation to the bottom-up cost modelling approach, the CMA noted in the EMI Final Report that this was better suited to implementation by a sector regulator, as it required a significant amount of work, time, information, expertise and liaison across the sector both to establish and to review to ensure ongoing accuracy. Consequently, the CMA considered that this approach did not meet its practicability criterion for creating the PCR given the statutory deadline for its investigation.
- 2.28 At the time the PCR was introduced, no such detailed price cap methodology existed in the energy sector, and this led the CMA to create the PCR using a hybrid reference price and cost index methodology.
- 2.29 We consider that the introduction of the DTC provides us with relevant and additional information for assessing the accuracy of the PCR, allowing us to determine more easily whether there have been any changes in the costs that suppliers would incur that may amount to changes of circumstance. Further, the DTC also provides information and evidence as regards whether, by reason of any change of circumstance, the PCR no longer remains appropriate and needs varying; and accordingly, the scope and magnitude of any variation.

⁴² Ofgem adopted the DTC by introducing Gas and Electricity Standard Licence Conditions 28AD.

- 2.30 We also recognise that, while the two price caps do not overlap in terms of the energy customers to whom they apply, they are set at different levels, and using different methodologies, and the differences in the resulting price caps will provide signals to suppliers. Consequently, we have given consideration to the potential for this situation, even if not caused directly by the introduction of the DTC, to cause concerns for suppliers, consumers and efficient and consistent regulation of the energy markets.
- 2.31 In this review, we have therefore considered whether the presence of the DTC, operating alongside the PCR, may affect suppliers' and/or customers' incentives in the way they engage in the relevant markets, including with respect to the roll-out and adoption of smart meters, and whether the co-existence of two price caps by itself amounts to a change of circumstance.
- 2.32 In this area we received comments from a significant number of stakeholders with a preference for achieving regulatory consistency in this sector, through the CMA in this review either adopting Ofgem's DTC methodology, or revoking its Order and relying on Ofgem to protect prepayment customers on an ongoing basis. These comments seeking consistency were in part based on a view of the increased accuracy of the DTC as well as the potential for a variety of interactions between the price caps, despite them applying to different customer groups.

Potential for interaction between the PCR and DTC

- 2.33 As noted above, the DTC applies only to domestic non-prepayment customers on default tariffs,⁴⁴ and the PCR applies to all domestic prepayment customers on SMETS1 smart meters and traditional meters.⁴⁵ In relation to the potential for the PCR and DTC to affect customer and supplier incentives, we have considered the following specific matters put to us by stakeholders:
 - *(a)* that the two price caps are confusing for customers, making it difficult to compare their options;
 - *(b)* that the two price caps disincentivise prepayment customers from switching to SMETS2 smart meters; and
 - (c) that two price caps reduce incentives for suppliers to roll-out SMETS2 smart meters to prepayment customers, and that the co-existence of two

⁴⁴ Those customers on standard variable tariffs and any fixed tariffs that customers default onto at the end of a fixed term deal.

⁴⁵ When a prepayment customer is moved onto SMETS2 smart meters, they are no longer covered by the PCR and fall within the scope of the DTC if they move to a default tariff.

price caps restricts the ability of suppliers to cross subsidise between prepayment and credit customers.

- 2.34 We explore these issues in turn below:
 - a) Whether two price caps are confusing for customers
- 2.35 One supplier suggested that the introduction of the DTC had made comparing different tariff options available to customers more difficult, and in particular, how tariffs compare over time and for different levels of consumption.
- 2.36 First, we noted that the DTC does not directly affect the number of tariffs that consumers are likely to see in the market. Consequently, it is not clear how an additional price cap such as the DTC, in and of itself, would add complexity to the tariff comparison process. Instead, we note that it has the beneficial effect of constraining the level of the default tariffs available to the customers on standard and smart meters.
- 2.37 Second, and as noted in the EMI Final Report, frequent tariff introductions and withdrawals, and Ofgem's interventions in this area, have been a persistent feature of the energy markets to which we consider customers have become accustomed.⁴⁶
- 2.38 Consequently, we have not seen sufficiently compelling evidence in this review to suggest that the introduction of the DTC alongside the PCR would affect customers' ability to compare tariffs.
 - *b)* The two price caps disincentivise prepayment customers from switching to SMETS2 smart meters
- 2.39 Some suppliers raised the possibility that as the DTC applies to prepayment customers with SMETS2 smart meters, while the PCR level is lower than the DTC, prepayment customers might be discouraged from having a SMETS2 smart meter installed, and noted that this could distort price signals and may hinder the roll-out of smart meters.
- 2.40 We note that this concern was present in the market before the DTC was introduced, where customers falling outside the PCR due to receiving a smart meter were no longer protected by any price cap. We consider that the introduction of the DTC mitigates this effect, by extending pricing protection to

⁴⁶ Reflecting a number of factors including different wholesale procurement strategies and changes in competitive positioning.

a further group of customers, including those prepayment customers that receive a SMETS2 smart meter and fall outside the PCR.⁴⁷

- 2.41 Consequently, we consider that the DTC has improved incentives in this area rather than having damaged them.
 - c) Whether the two price caps reduce incentives for suppliers to roll-out SMETS2 smart meters to prepayment customers
- 2.42 We have also considered whether the introduction of the DTC might be deterring suppliers from rolling out SMETS2 smart meters to prepayment customers.
- 2.43 This might be the case where a supplier was seeking to encourage prepayment customers to adopt SMETS2 smart meters by offering them attractive fixed term tariffs with an expectation that, over time, they would fall onto more expensive standard variable or default tariffs. The imposition of the DTC price cap on default tariffs makes this strategy less profitable for suppliers.
- 2.44 More generally, some suppliers indicated that the introduction of the DTC in addition to the PCR might restrict their ability to increase prices for their credit customers to mitigate the impact of the PCR on their businesses. In response, we note that the PCR was designed to ensure that suppliers of prepayment customers could earn a normal rate of return without a need to cross-subsidise, and evidence that the PCR was not set appropriately in this manner is considered directly in this review.

Provisional finding on the introduction of Ofgem's DTC

- 2.45 While we are aware that the DTC has only been in place since January 2019, we have not seen evidence that the co-existence of the PCR and DTC in separate segments of the markets has significantly affected the incentives of either suppliers or customers. Accordingly, our provisional finding is that the co-existence of the PCR and DTC does not amount to a change of circumstance.
- 2.46 However, we consider that the introduction of the DTC is relevant for the purposes of:

⁴⁷ The exception is those prepayment customers that have chosen to select a fixed rate tariff and have a SMETS2 smart meter installed.

- (a) providing us with relevant and additional information for assessing the accuracy of the PCR;
- (b) allowing us to determine more easily whether, since the PCR, there have been any changes in the costs that suppliers incur; and
- *(c)* providing information and evidence as regards whether, by reason of any change of circumstance, the PCR no longer remains appropriate and needs varying; and accordingly, the scope and magnitude of any variation.

Changes in costs estimated by the PCR

- 2.47 As described in the EMI Final Report, accuracy was one of the criteria by which the effectiveness and proportionality of the PCR was assessed. This criterion was described as 'whether the cap accurately reflects changes in competitive market conditions over time, and any changes in the costs that an efficient supplier would be expected to bear'.⁴⁸
- 2.48 Specifically, the EMI Final Report noted that while the methodology chosen for the PCR would accommodate changes in wholesale and network costs relatively simply and quickly, it was more challenging to accommodate changes in policy costs with the same degree of accuracy.⁴⁹
- 2.49 Notwithstanding these difficulties, the CMA considered at the time that the design chosen was effective and proportionate to address the detriment deriving from the AECs and associated features of the prepayment segments during the roll-out of smart meters, as well as allowing suppliers to earn a normal rate of return and to compete below the PCR level to the benefit of customers.
- 2.50 We have assessed whether the PCR continues to reflect accurately the changes in costs that have taken place over time. Specifically, we have considered all elements of the PCR in this review including the following categories:
 - (a) wholesale costs;
 - (b) policy costs;
 - (c) network costs;

⁴⁸ EMI Final Report paragraph 14.37.

⁴⁹ EMI Final Report paragraph 14.56.

- (d) operating costs and EBIT;
- (e) headroom; and
- (f) smart metering costs.
- 2.51 During our review, we received significant and consistent evidence from stakeholders concerning changes in policy and smart metering costs, and limited evidence concerning changes in wholesale costs. We received no evidence of concerns relating to the accuracy of the other cost components of the PCR, other than a general preference for the increased granularity and accuracy that stakeholders considered to arise from the DTC methodology.
- 2.52 We carried out a comparison of the estimates from the above categories between the DTC and the PCR. We found some evidence that policy and smart metering costs had changed materially since the design of the PCR, and that the DTC adopted a different approach to wholesale costs that showed little divergence from the PCR in practice. Further, we found no difference in network costs, and that differences between operating costs (including EBIT) and headroom balanced out between the two methodologies. Consequently, in the sections below, we explore the nature of the differences in policy, smart metering and wholesale costs.
- 2.53 While we assess these categories of cost individually below, for our assessment of whether a change of circumstance has occurred, we have based our assessment on all of these categories of cost in the round.

Policy costs

- 2.54 The policy cost component of the PCR is intended to allow suppliers to recover the costs of complying with various environmental and social policy schemes imposed on the energy sector by Government and other bodies.⁵⁰
- 2.55 Both Ofgem and other stakeholders considered that the levels of policy costs in the PCR are lower than the levels of policy costs that are actually incurred by suppliers. They also compared the PCR methodology with that of the DTC and suggested that the policy cost component estimated in the DTC, appears to be a more accurate reflection of the actual policy costs that have been incurred since the design of the PCR.

⁵⁰ There are currently six schemes in operation which result in policy costs to suppliers: Contracts for Difference (CfD), Feed in Tariffs (FiT), Renewable Obligations (RO), Energy Company Obligations (ECO), Warm Home Discounts (WHD) and Assistance for Areas with High Electricity Distribution Costs (AAHEDC).

- 2.56 We have assessed these arguments based on evidence provided by Ofgem.⁵¹ In particular, we have considered whether:
 - (a) actual policy costs incurred by suppliers have diverged from the methodology adopted in the PCR; and
 - (b) the DTC provides a more accurate estimate of actual policy costs than the PCR.

Divergence of PCR estimates of policy costs from actual costs incurred

- 2.57 Ofgem provided the CMA with evidence showing that the use of the Office of Budget Responsibility (OBR)⁵² forecast to set a base of the index used to update policy cost component of the PCR had introduced a downward bias in the way this is calculated.⁵³ This is because the value of the index in the base period affects the calculation of policy cost component in every subsequent period of the PCR.54
- 2.58 The CMA set the base of the index in 2015, based on the OBR forecast in that year. The out-turn figure became available in 2017 and this is lower than the forecast used in the PCR. The difference between the estimate and out-turn

⁵¹ Because suppliers' views on the PCR's policy cost allowance align with those of Ofgem, we have taken the approach of examining certain more detailed evidence presented by Ofgem on this issue. See paragraph 2.57 onwards.

⁵² The Office for Budget Responsibility is a non-departmental public body that the UK government established to provide independent economic forecasts and independent analysis of the public finances. ⁵³ The CMA adopted a two-step methodology to estimate the policy cost allowance in the PCR.

In 2015, the CMA set the policy costs' baseline value, which was one of the three cost components in which the competitive benchmark bill was composed. This value does not change in the subsequent PCR periods. Rather, it is indexed every six months, to allow for changes in policy costs over time.

The CMA used the OBR's projections for the costs as the index values for policy costs. The indexing process is defined as follows:

The CMA set the value used as a base of the index. Because in 2015 the out-turn of this value was not available, the CMA decided to use OBR projections as an estimate.

In each period, the rate of change between the forecasted update of the index in that period and the base of the index is applied to the policy costs' baseline value. The forecasted update of the index in period j is the value used in each period (in this case period j) to update the base of the index defined in 2015. For this figure, the CMA uses OBR forecasts at the start of each period.

The formula below describes how the policy cost allowance at medium consumption is defined in every period: Policy cost allowance in period j = $\frac{Policy cost baseline value in 2015 x Forecasted update of the index in period j$ Base of the index in 2015

⁵⁴ The base of the index is the base of the indexing model for policy costs, which the CMA set in 2015 and would not change over the periods. In each period, the rate of change between the forecasted update of the index in that period and the base of the index is applied to the policy costs' baseline value.

figures is approximately £6 per customer,⁵⁵ which amounts to approximately 5% of the current total policy cost component in the PCR.⁵⁶

2.59 The data available on two charge restriction periods⁵⁷ show that the PCR, recalculated with the OBR out-turn figure for the 2015 base of the index,⁵⁸ would align with the actual policy costs⁵⁹ in those periods. However, we note that this analysis excludes Capacity Market costs. As a result, our findings do not show whether the OBR forecasts used to update the Capacity Market costs have been accurate in the two periods where OBR out-turn data is now available.

The DTC provides a more accurate estimate of actual policy costs

- 2.60 Both Ofgem and some other stakeholders⁶⁰ compared the approaches of the PCR and DTC to estimating policy costs. The typical conclusion was that the DTC methodology provided a more accurate estimate of actual policy costs than the PCR.
- 2.61 Ofgem provided evidence showing that the policy cost component of the PCR and DTC have diverged in each cap period since 2017,⁶¹ and the gap has increased over time to £22⁶² in Summer 2019. This difference accounts for approximately 16% of total policy cost component⁶³ and about 2% of the total price cap level under the PCR.⁶⁴

⁵⁸ Index updates are kept as in the original calculation, thus based on OBR forecasts.

⁵⁵ This is calculated at Ofgem's Typical Domestic Consumption Values (TDCVs). The difference causes a downward bias in the PCR due to the formula for policy costs using the OBR forecasted base of the index in the denominator.

 ⁵⁶ This figure and the results in the following paragraph refer to policy cost allowance for electricity only.
 However, because the majority of policy costs are under electricity, these findings are significant for the total policy cost allowance.
 ⁵⁷ 1st April 2017 to 30th September 2017, 1st October 2017 to 31st March 2018. Data are also available for two

⁵⁷ 1st April 2017 to 30th September 2017, 1st October 2017 to 31st March 2018. Data are also available for two back-casted periods before that (April 2016 – September 2016 and October 2016 – March 2017).

⁵⁹ The closest approximation of actual policy costs is the PCR re-calculated using the OBR out-turn for both the base of the index and the updates in each period. These estimates are known for two out-turn periods only.
⁶⁰ See responses from stakeholders published on the CMA Website.

⁶¹ Ofgem used back-casts for the DTC for comparison.

⁶² The difference in the policy cost allowance including Capacity Market costs is £22. The impact of the other allowances that are applied as percentages (EBIT, Headroom, VAT) is an additional £2. Therefore, the total difference is £24.

⁶³ Both gas and electricity are included in the policy cost allowances of the two caps.

⁶⁴ For the purposes of comparing policy costs in the two caps on a like-for-like basis, Ofgem counted the Capacity Market costs within the policy cost allowance of the DTC. These costs are included within the policy cost allowance of the PCR but are normally part of the wholesale energy cost allowance in the DTC. Ofgem identified Capacity Market costs as one of the areas causing divergence between policy cost allowances in the two caps between the Summer 2017 cap period and the Summer 2019 period. We consider this to be due to different approaches adopted in the two caps to estimate these costs. Capacity Market costs in the PCR are included within the 2015 benchmark and updated each period using the OBR forecasts. The DTC calculated these costs using information on auction clearing prices with forecasts of gross peak demand.

- 2.62 While the aims of both the PCR and DTC are broadly the same in terms of approach, they differ in terms of the way costs are grouped,⁶⁵ and how those costs are estimated. We had insufficient data available⁶⁶ to analyse in full which of the two methodologies provide for more accurate estimates of policy costs over time. However, we consider that the following factors would indicate that the DTC methodology is, in principle, more robust and accurate in its assessment:
 - *(a)* the approach to estimating policy costs in the DTC is more granular than in the PCR, estimating each policy cost component separately;
 - *(b)* the DTC uses scheme administration data,⁶⁷ which we expect to be more accurate than the OBR projections used to set policy costs in the PCR;
 - *(c)* the DTC accounts for changes in volumes of energy supply by calculating policy cost component on a per MWh basis and including the energy intensive industries exemption (EII);⁶⁸ and
 - (*d*) the DTC uses more recent data. The DTC allows the use of scheme administrator data underlying some of the policy cost schemes published between the OBR report and the DTC update.
- 2.63 In view of the above, our provisional finding is that policy costs have changed since the design of the PCR such that there is a downward bias in the way that policy costs are estimated in the PCR due to the difference between the OBR forecasts and out-turn for the base year. We have also found that policy costs have increased to a level materially higher than reflected in the relevant cost component in the PCR. We have also considered the relative merits of DTC and PCR methodologies for forecasting policy costs, and provisionally find that the DTC is, in principle, more robust and accurate.

Smart metering costs

2.64 At the time the PCR was created, the EMI Final Report set out the CMA's approach to smart metering costs:

 ⁶⁵ With the exception of capacity market costs which are recovered in different areas in the two methodologies.
 ⁶⁶ Given the short period the DTC has been in operation.

⁶⁷ This includes official forecasts or data from scheme administrators.

⁶⁸ This exemption implies that energy-intensive industries do not face the costs of certain environmental schemes. The costs of these schemes are instead recovered from non-exempt customers. The PCR does not provide an allowance for these costs. When the PCR was set, changes in costs of the Energy Company Obligations (ECO) scheme relative to the level included in the competitive benchmark were expected to net off with the allowance for the EII exemption.

We have also considered the cost estimates contained within the smart meter roll-out impact assessment. This shows that the estimated annual net cost to business is £36 million per year. This translates to approximately £1.50 per customer per year. We note that this is significantly less than the prepayment uplift allowance (£24 for electricity, £39 for gas). While not all the costs making up the prepayment uplift relate to the specifics of the dumb meter infrastructure we consider that the prepayment uplift is sufficient that for any smart meters in scope of the price cap (e.g. SMETS1 smart meters) the prepayment uplift more than covers the associated costs. ⁶⁹

- 2.65 Since the PCR was introduced in April 2017, and for a number of unforeseen reasons, including the delays to the smart meter programme, the total costs associated with the smart meters and the roll-out programme have increased significantly from the original Government estimate of £1.50 per customer per year (which the CMA used in designing the PCR). Ofgem determined total smart meter costs to be £41.52 per customer in 2019.⁷⁰ The total pass-through smart metering costs are £21 per dual fuel customer in 2019 and have increased by around £9 from the 2017 level. This demonstrates that such an increase in costs can have a significant impact on suppliers and customers.
- 2.66 Ofgem splits smart metering costs into two categories, pass-through and non pass-through costs. Pass-through costs⁷¹ reflect those costs which all suppliers must meet regardless of their progress in the rollout of the smart meters. In contrast, non-pass through costs are those linked directly to the progress made by individual suppliers concerning the roll-out.⁷²
- 2.67 Non-pass through costs are set using the cost-benefit analysis⁷³ model developed by BEIS and pass-through costs are calculated by Ofgem for a given period (two to three times per annum) and these are then compared to the 2017 base value to identify any incremental change. Pass-through smart metering costs in 2017 were £12.40, and Ofgem included these in the operating cost component of the DTC. Since 2017, pass-through costs have increased to £21.80 in the current charge restriction period.⁷⁴

⁶⁹ EMI Final Report paragraph 14.238.

⁷⁰ See Ofgem website for details.

⁷¹ Pass-through costs are charges payable to Data Communication Company (DCC), Smart Energy GB (SEGB), Alternative Home Area Network Company (Alt Han), Smart Energy Code Administrator and Secretariat (SECAS) and Smart Meter Installation Code of Practice (SMICoP).

⁷² Non-pass through costs include cost of the metering assets, installation, In Home Display and system changes.

⁷³ CBA refers to the cost benefit analysis model which was created by the Department for Business, Energy & Industrial Strategy at the inception of the smart meter roll out with initial model published in 2014.

⁷⁴ The non-pass through costs are £20 at present.

- 2.68 The PCR did not account directly for the possibility of changes in smart metering costs in its methodology. When assessing whether the increase in smart metering costs may amount to a change of circumstance, we have considered whether both non-pass through costs and pass-through costs are costs it is appropriate for prepayment customers to bear.
- 2.69 In relation to non-pass through costs, which relate to the roll-out and installation of actual smart meters, we note that the PCR only applies to prepayment customers without an interoperable smart meter. We therefore do not consider it appropriate for such costs to be borne by prepayment customers within the scope of the PCR.
- 2.70 In contrast, pass-through costs relate to the costs of establishing, marketing and operating the smart metering system (that is the underlying smart meter infrastructure). These costs are distributed across all suppliers, on a market share basis, irrespective of whether or not a particular customer has a smart meter. Given this position impacts on prepayment suppliers, we consider it appropriate for such costs to be borne by prepayment customers.
- 2.71 Accordingly, our provisional finding is that smart metering costs have increased to a level materially higher than reflected in the PCR. While we do not consider that it is appropriate for non-pass through costs to be borne by prepayment customers, it is appropriate for pass-through smart metering costs to be borne by prepayment customers.

Wholesale costs

- 2.72 The CMA and Ofgem have taken different approaches to determining the appropriate level of wholesale costs to include in the PCR and DTC. In the PCR, the wholesale cost component is set in the baseline by apportioning wholesale costs from the 2015 price reference benchmark then updating this over time using a 6-2-12 observation window of forward contracts.⁷⁵ Ofgem sets the wholesale component in the DTC in each period based on the 6-2-12 observation window of forward contracts plus allowance for a) shaping, forecast error and imbalance costs; b) transaction costs; c) additional risk and uncertainty; and d) losses.
- 2.73 The PCR wholesale cost component for the average PCR bill (£1,242)⁷⁶ is currently £14 lower than the equivalent component in Ofgem's DTC and this

⁷⁵ The 6-2-12 update methodology relates to looking at 6 months' worth of daily prices with a 2-month lag for delivery in 12 months. E.g. for the April 2019 cap, there is a 2-month lag from the update in Feb 2019 then Ofgem would have looked at daily prices from Aug 2018-Feb 2019 (6 months) for delivery in 12 months (Apr 2019 – Mar 2020).

⁷⁶ Based on Ofgem's typical domestic consumption levels (TDCV).

difference has been fairly stable over time. At present, it represents just over 1% of the average PCR level, and a variance of 2.7% on the wholesale component.

- 2.74 We received relatively few submissions from stakeholders in relation to wholesale costs. These submissions largely focused on the same issue, namely that the PCR wholesale cost component does not include all the relevant cost that suppliers incur when purchasing energy, including the costs related to shaping, losses and uncertainty.
- 2.75 We consider that these arguments are based on a potential difference in understanding of the PCR methodology. While Ofgem has been explicit in making various allowances in addition to the cost of forward contracts, these allowances are implicitly included in the PCR. This is because the PCR, as set in 2015, was based on a competitive benchmark, the levels of which would have reflected all relevant wholesale costs, including shaping, losses and uncertainty.
- 2.76 Overall, we consider that the PCR methodology provides an adequate reflection of wholesale costs, and we have found the difference between the DTC and PCR methodology to represent only around 1% of the total PCR value. Moreover, having explored the extent and nature of the different PCR and DTC methodologies in this area, we have not found any material deficiency in the way the PCR calculates wholesale costs. Our provisional finding is therefore that wholesale costs have remained broadly in line with the relevant estimates in the PCR.

Provisional finding on changes in costs

- 2.77 For the reasons set out above, our provisional finding is that certain costs that suppliers incur in order to supply prepayment customers have increased to a level materially higher since the design of the relevant components of the PCR. In particular:
 - (a) Policy costs have changed since the design of the PCR such that there has been a downward bias in the level of the PCR, due to its reliance on an OBR forecast that turned out to differ from the out-turn figure by approximately £6 per customer. This amounts to approximately 5% of the current total policy cost component.⁷⁷
 - (b) Pass-through smart meter costs have changed since the design of the PCR and at the time the PCR was created their forecast level was

⁷⁷ This excludes gas policy cost allowance. However, this is only a minor part of the total policy cost allowance.

considered implicitly able to be absorbed in the prepayment uplift. At the time these costs were estimated to be approximately £1.50 per customer per year in 2015,⁷⁸ but are now estimated by Ofgem to be approximately £21.

2.78 Taken together, our provisional finding is that changes in policy costs and smart meter costs have changed since the design and introduction of the PCR and amount to a relevant change of circumstance. We assess in Chapter 3 whether, by reason of such a change of circumstance, the Order is no longer appropriate and needs to be varied.

Provisional findings on changes of circumstance

- 2.79 For the reasons set out above, we have provisionally found the following:
 - (a) The conditions of competition in the prepayment segments have not improved materially since the introduction of the PCR, and levels of overall engagement among prepayment customers are still low and, therefore, this does not amount to a change of circumstance.
 - (b) The roll-out of smart meters has not progressed in line with the initial projections on which the EMI Final Report was premised. Evidence shows that it is not on track to complete by the end of 2020 and we believe may be as much as two years behind schedule. Consequently, there will be a significant proportion of prepayment customers without a smart meter at the time the PCR expires on 31 December 2020, when the roll-out was expected to be substantially complete. Accordingly, we have provisionally found that the delay to the roll-out programme for smart meters is significant and represents a relevant change of circumstance.
 - (c) While we are aware that the DTC has only been in place since January 2019, we have not seen evidence that the co-existence of the PCR and DTC in separate segments of the markets has significantly affected the incentives of either suppliers or customers, although we recognise that two separate price caps with different methodologies creates this possibility at least in theory. We also note that it is difficult to forecast accurately the significance of issues around divergence between price caps were we to reach a decision not to vary the Order. We also highlight that the PCR is intended to allow suppliers to earn a normal rate of return from prepayment customers, without the need for cross subsidies from

⁷⁸ See paragraph 14.238.

prices charged to other customers.⁷⁹ Accordingly, our provisional finding is that the co-existence of the PCR and DTC does not amount to a change of circumstance.

- (d) However, the introduction of the DTC is relevant for assessing the accuracy of the PCR, whether there have been any material changes in costs since the introduction of the PCR and whether, by reason of any change of circumstance, the PCR no longer remains appropriate and needs varying; and accordingly, the scope and magnitude of any such variation.
- (e) Some of the costs that an efficient supplier is expected to bear in supplying prepayment customers have increased to a level materially higher than that reflected in the PCR methodology. There are two categories of cost where, due to changes since its design and introduction, the PCR is underestimating costs incurred which, together, amount to a change of circumstance:
 - (i) policy costs have changed since the design of the PCR such that there is a downward bias in the PCR due to the difference between the OBR forecasts and out-turn for the base year, and we have found the DTC to be a more accurate estimate of policy costs than the PCR; and
 - (ii) pass-through smart metering costs have changed since the design of the PCR such that these have increased to a level materially higher than the level allowed for in the PCR.

⁷⁹ As noted above, if the PCR were not set appropriately in this manner, we would consider whether this should be addressed directly in this review.

3. Appropriateness of the Order

- 3.1 In this Chapter we assess whether by reason of the changes of circumstance we have provisionally found in Chapter 2 above, the Order is no longer appropriate in meeting all its aims and needs to be varied or revoked. In considering this, we have taken into account:
 - *(a)* whether, in principle, a charge restriction such as the PCR remains appropriate;
 - (b) whether the level of the PCR remains appropriate; and
 - (c) whether the duration of the PCR remains appropriate.

Whether a charge restriction such as the PCR remains appropriate

- 3.2 For the reasons set out in Chapter 2, we have provisionally found that the conditions of competition in the prepayment segments have not improved significantly since the introduction of the PCR and that levels of overall engagement among prepayment customers remain low. We therefore consider that, in order to address the adverse effects on competition, and detriment for prepayment customers, as identified in the EMI Final Report, a charge restriction such as the PCR remains appropriate and should not be revoked.
- 3.3 As a result, we have only considered whether, by reason of the changes of circumstance we have provisionally found, the PCR is no longer meeting its other aims (of allowing efficient suppliers to compete beneath the level of the cap while still earning a normal return on capital) and, accordingly, needs to be varied.

Level of the PCR

- 3.4 Given the divergence in costs incurred by suppliers and as measured by the PCR, we have considered the extent to which these affect the appropriateness of the PCR in achieving all of its aims.
- 3.5 As set out in the EMI Final Report,⁸⁰ in assessing the appropriate level of the PCR, the CMA considered the '*impact of the [PCR] on customers and suppliers, taking into account the need to reduce the detriment for prepayment customers while allowing efficient suppliers to compete beneath*

⁸⁰ See in particular paragraph 14.251

the level of the cap while still earning a normal return on capital.' The CMA took account of:

- *(a)* the reduction in consumer detriment that would be achieved by the PCR in reducing prices paid by prepayment customers;
- *(b)* the impact on supplier profitability, considering both the impact on existing suppliers' EBIT and the implied EBIT that the PCR would allow a notional efficient supplier in a steady state to earn;⁸¹ and
- *(c)* the impact of the PCR on competition for customers in the prepayment segments.
- 3.6 The intention of these factors was to ensure a balanced approach that recognises:
 - *(a)* the interests of prepayment consumers, who are well served by a price cap that limits detriment while still allowing competition to take place below the cap level; and
 - *(b)* the needs of efficient suppliers to recover costs and earn a normal rate of return in order to compete for and offer a good service to prepayment customers.
- 3.7 On that basis, for the purposes of assessing whether the Order is no longer appropriate in meeting all its aims and needs to be varied, we have given particular consideration to whether an efficient supplier in a steady state could earn a normal rate of return by supplying prepayment customers, and the likely impact of the price cap and potential changes to it on prepayment customers.

Assessing an efficient supplier's rate of return

3.8 Carrying out a full assessment of whether a notional efficient supplier would be able to earn a normal rate of return in a steady state would be complex and time-consuming, and for the purposes of this review, we have sought to verify whether the level of the PCR remains appropriate by carrying out the following indicative analysis:

⁸¹ The CMA found, for the purpose of constructing a competitive benchmark, that such a notional efficient supplier would earn an EBIT of 1.25%.

- *(a)* exploring the scale of the difference in costs between those allowed for in the PCR and those incurred in practice by suppliers, and as measured by the DTC methodology; and
- *(b)* examining the impact of the PCR on the finances of Utilita, an energy supplier which has more than 90% of its customers using prepayment meters.

Scale of the difference in costs

- 3.9 As noted in paragraphs 2.63 and 2.71 above, we have found that both policy costs and smart metering costs have changed materially since the PCR was established and there are now improved methodologies to track these costs more accurately than was the case when the PCR was designed.
- 3.10 The divergence in policy costs in the PCR compared to the DTC methodology is £24 as described in paragraph 2.61, while the smart metering costs that we consider it appropriate to be borne by prepayment customers amount to £21.80.⁸² This means that, at present, we consider that the PCR methodology is resulting in an under-recovery of cost of around £45.80 for a typical customer.
- 3.11 The PCR included a headroom over and above a level that would have allowed a supplier to earn a normal rate of return to allow scope for suppliers to compete below the level of the PCR. This headroom was not included to allow for offsetting risks arising from potential inaccuracies in methodology and estimates in the PCR design or for unforeseen changes in costs. In order to assess the materiality of the difference in policy costs and pass-through smart metering costs under the DTC from the PCR we have compared that difference against the headroom included in the PCR. Doing this allows us to determine whether the impact of such costs difference could cause a notional efficient provider to earn a negative rate of return.
- 3.12 In this case, we are aware that the dual fuel headroom is £36, while the overall divergence in policy costs and pass-through smart metering costs is £45.80. Therefore, we provisionally conclude that this scale of difference in costs compared to the PCR is of a magnitude likely to lead an efficient supplier to earn a negative rate of return under the PCR. This negative return would affect the ability of suppliers to compete for new prepayment customers and to provide a high service level. Ultimately, this may lead to some efficient suppliers exiting the market. Such outcomes would not serve prepayment

⁸² The pass-through costs borne by all energy suppliers on the basis of their market share.

customers well and do not allow for the possibility of competition becoming more effective. Consequently, this analysis indicates that the current difference in estimates of cost means the PCR is not meeting all of its aims.

Analysis of Utilita's financial performance

- 3.13 The financial information (including forecasts for 2019)⁸³ submitted by Utilita indicates that, since the introduction of the PCR, Utilita's level of EBIT has changed in a manner that is consistent with our assessment of the PCR methodology's growing underestimation of costs in the market. Our analysis shows that this is the case even after eliminating any possible non-trading factors that may affect the company's results.
- 3.14 With the adjustments⁸⁴ made, the company's EBIT (as a percentage of sales) in 2018 and 2019 were [≫] and [≫] respectively. This is shown in Table 1 below, which suggests a probable under-recovery of costs incurred by the company under the PCR.

⁸³ 2019 figures are based on Utilita's draft management accounts.

⁸⁴ The adjustments include aborted sale costs in 2018 and an estimated effect calculated by the CMA of the acquisition cost policy change implemented in 2019.

Table 1: Summary of noted one off costs⁸⁵ and other adjustments to Utilita's EBIT from 2015 to 2019

	FY15 FS Actual 31/03/2015 £'000	FY16 FS Actual 31/03/2016 £'000	FY17 FS Actual 31/03/2017 £'000	FY18 FS Actual 31/03/2018 £'000	FY19 Man a/ccs Draft 31/03/2019 £'000
EBIT	10,776	24,239	17,087	7,938	[%]
EBIT %	7%	10%	4%	1%	[%]
Add adjustments noted Non-recurring benefits Abortive costs of sale of business Depreciation policy change		827	572	[≫] 884	
Accounting estimate change			3,600		
Acquisition costs expensed (CMA estimate)					[%]
Adjusted EBIT Adj. EBIT %	10,776 7%	25,066 10%	21,259 5%	[%] [%]	[%] [%]

Source: CMA calculations with Utilita financial information.

3.15 Although we only attach limited weight to this evidence, it is consistent with our provisional finding that the PCR is no longer set at a level that enables notional efficient suppliers to earn a normal rate of return and compete under the PCR in the manner envisaged in the EMI Final Report.

Impact on prepayment customers of changes to the PCR

3.16 The analysis in the two sections above considers the impact of the level of the PCR on firms' ability to earn a normal rate of return through supply in the prepayment segments, and whether there may be a need to adjust the PCR to reflect this. The aims of the PCR were, however, wider and took account of the need to address the detriment to consumers from high prices, the need to allow a notional efficient supplier to make a normal rate of return, and the broader need to allow for competition in the prepayment segments at prices

⁸⁵ One off costs represent costs which do not relate to company's trading activity such as aborted sale costs. This type of costs also identifies any changes to the accounting estimates that have an immediate and future repercussions for the company's financial performance as reported in the Income Statement such as changes to the depreciation policy, liability provisions and recognition of capital expenditure. Removal of these costs from the company's reported profitability allows to identify the profit made purely from the trading activity in a 'stable' state.

under the cap. In this section we consider the implications for consumers of the cap being at too low a level and the impact of an increase to it.

- 3.17 When selecting appropriate remedies in its investigations, the CMA is required to seek the least costly and least intrusive remedy that it considers to be effective. The scope, design and level of the PCR were originally set following a detailed assessment of the effectiveness of different options in achieving the aims noted above, and the proportionality of those various options.
- 3.18 In this case, at the time the PCR was created, the CMA concluded that the PCR had been set at a level that was striking an appropriate balance between its different aims, including the need effectively to reduce detriment, the recovery of efficient costs by suppliers and the facilitation of competition below the level of the cap.⁸⁶ It noted that, while it could have opted for a more stringent cap to reduce detriment further, this would have increased the risk of the PCR being too low, with a greater risk of undermining competition.⁸⁷ We have adopted a similar approach for our assessment of whether the PCR is meeting all its aims in this review.
- 3.19 Our specific concerns are that suppliers earning less than a normal rate of return would not be incentivised to provide a high level of service to consumers, or to compete on service and, given that we understand from prepayment suppliers that service is particularly important for prepayment customers, this may lead to longer-term consumer detriment as a result. Unduly low levels of the PCR may also lead to a reduction in competition on price, with little ability for efficient suppliers to compete below the level of the PCR.
- 3.20 In the longer term, maintaining the PCR at a level where suppliers would not be able to earn a normal return on capital may lead to efficient suppliers leaving the market. While entry and exit are normal features of competitive markets, it would be a cause for concern if a remedy that was intended to work alongside competition was to lead to a reduction in the number of suppliers. In addition, exits of suppliers generate costs both directly in terms of customers who may be unsettled in being transferred through the supplier of last resort mechanism operated by Ofgem and the possible loss of any energy they have purchased on a prepayment basis, and indirectly given the costs of that system are ultimately borne by customers. As a result, any exit of

⁸⁶ EMI Final Report, paragraphs 14.27-14.28 and 14.250 to 14.275 (in particular 14.257 and 14.273).

⁸⁷ EMI Final Report, paragraph 14.274.

suppliers caused by the level of the PCR being set too low would be likely to reduce choice and increase costs for prepayment customers in the long-run.

3.21 Consequently, our provisional view is that while the PCR at its current level is meeting the aim of reducing the detriment identified in the EMI Final Report, it is not currently at a level that allows efficient suppliers to earn a normal rate of return, to be incentivised to remain in the segments and to serve prepayment customers better and to allow for competition below the level of the cap. While prepayment customers would have to pay for an increase in the level of the PCR, we consider it appropriate that the PCR should be set at a level so that it meets all its aims.

Provisional conclusion

- 3.22 We provisionally conclude that, by reason of a change of circumstance resulting from an increase in policy costs and pass-through smart meter costs since the design of the PCR, the Order is no longer appropriate in meeting all its aims and needs to be varied.
- 3.23 In reaching this provisional conclusion, we have taken into account that the overall level of the PCR is currently lower than required to address the full scale of the detriment, while allowing a notional efficient supplier the ability to earn a normal rate of return and allowing for competition below the level of the cap.

Whether the duration of the PCR remains appropriate

- 3.24 As set out in the EMI Final Report,⁸⁸ the CMA decided to introduce a price cap for prepayment customers but not for other domestic customers. We note that the CMA considered that while other remedies in the EMI Final Report would help improve the conditions for competition in the prepayment segments, these would not fully address the detriment arising from both the Domestic Weak Customer Response and Prepayment AECs, estimated at £388 million per year for all prepayment customers (see paragraphs 2.5 and 2.6) until smart meters had been substantially rolled out (scheduled at the time of the EMI Final Report for the end of 2020).⁸⁹
- 3.25 As set out in Chapter 2 above, the roll-out of smart meters has been materially slower than anticipated and the programme is not on track to complete by the end of 2020 and we believe may be as much as two years behind schedule. It is therefore likely there will be a significant number of

⁸⁸ EMI Final Report paragraph 14.10.

⁸⁹ EMI Final Report, paragraph 14.14.

prepayment customers without a smart meter at the time the PCR expires on 31 December 2020.

- 3.26 As a result, we now expect the relevant AECs, and associated detriment for prepayment customers, to persist beyond the end of 2020. We therefore provisionally conclude that, while the duration of the Order remains appropriate to the extent that it provides a protection for prepayment customers until the end of 2020, after that date, the package of remedies adopted following the EMI Final Report, as a whole, will no longer be effective in addressing the detriment arising from the AECs until the substantial completion of the roll-out of smart meters.
- 3.27 The EMI Final Report contemplated this possible outcome, noting that in this situation, the CMA could consider whether to recommend to GEMA to review the situation and take appropriate action. Our recommendation to GEMA is explained in Chapter 5 below.

Provisional conclusion as to whether the Order is no longer appropriate and needs to be varied or revoked

- 3.28 We provisionally consider that, in order to address the detriment arising from the Domestic Weak Customer Response AEC and Prepayment AEC, a charge restriction such as the PCR remains appropriate and should not be revoked.
- 3.29 However, we have provisionally concluded that, by reason of a change of circumstance resulting from an increase in policy costs and pass-through smart meter costs since the design of the PCR, the Order is no longer appropriate in meeting all its aims and needs to be varied. In particular, the cost components in the PCR for policy costs and pass-through smart meter costs need to be varied as they materially underestimate these costs for the reasons set out in Chapter 2. We have also provisionally found that the DTC provides a more accurate estimate of these costs than the PCR.
- 3.30 In addition, because the roll-out of smart meters has been materially slower than anticipated at the time of the EMI Final Report, and we believe may be as much as two years behind schedule, there is likely to be a significant proportion of prepayment customers without a smart meter at the time the PCR expires on 31 December 2020, when the roll-out was expected to be substantially complete. While we consider the Order will remain appropriate in achieving its aims until that date, it will not be effective in doing so beyond that date. Therefore, we propose to address this by making a recommendation to GEMA to provide for ongoing protection following the expiry of the PCR with

its own price cap until the roll-out of smart meters is substantially complete. This is considered further in Chapter 5 below.

4. Changes to the PCR

Introduction

4.1 Having provisionally concluded that, by reason of one or more changes of circumstance, the Order is no longer appropriate in meeting all its aims and needs to be varied, pursuant to section 162 of the EA02, we have considered options for variation of the Order.

Assessment of options

- 4.2 Based on our analysis in Chapter 3, we have not found it appropriate to revoke the Order. However, and as noted in Chapters 2 and 3, we have provisionally found it appropriate to vary the Order, to ensure that the PCR is set at a level that addresses the relevant detriment identified by the CMA in the EMI Final Report while allowing efficient suppliers to earn a normal rate of return and to compete under the level of the PCR for the benefit of prepayment customers. Within this context, and as set out in Chapter 3, the CMA has provisionally found that the PCR materially underestimates the policy costs and pass-through smart meter costs now incurred by suppliers.
- 4.3 In order to determine how to carry out this variation, we have explored the following options:
 - (a) to amend the PCR methodology as set out in the Order by introducing aspects of the DTC methodology only in relation to policy costs and passthrough smart meter costs, and making any relevant and consequential change to the PCR methodology (the hybrid option); or
 - (b) to amend the Order by substituting Ofgem's current DTC methodology in place of the current PCR methodology, subject to three adjustments (the DTC methodology option). First, reflecting the specific costs of prepayment meters, second, reflecting the need to exclude non-pass through smart metering costs from the DTC methodology, and third to ensure that any potential changes in EBIT and headroom from the DCT do not automatically apply to the prepayment segments through the PCR. Specifically, this would involve:
 - (i) including a prepayment uplift to account for the cost of serving prepayment customers similar to the one included in the PCR methodology while removing all other payment uplifts from the DTC;
 - (ii) removing the non pass-through costs associated with installing smart meters (while maintaining the pass-through costs), as the PCR will continue to apply to prepayment customers without a smart meter; and

- (iii) rather than referring directly to the DTC methodology for EBIT and headroom, to amend the Order by reproducing the current methodology for these terms in the DTC. We consider this to be appropriate given the potential for different policy approaches to be taken to these components between Ofgem and the CMA, given the policy aims of the DTC differ from those for the PCR.
- 4.4 In order to assess these two options, in line with the approach taken in the EMI Final Report⁹⁰ we have evaluated their effectiveness in terms of their accuracy in assessing costs, their relative practicability and their impact on customers and suppliers. In doing so, we noted that, in determining the appropriate level of the PCR, the CMA took into account of the particular need to reduce detriment for prepayment customers while suppliers could earn a normal rate of return on capital and compete beneath the level of the PCR.⁹¹ The EMI Final Report noted that the PCR had been designed to allow for an efficient supplier to achieve an EBIT margin of around 5% across all prepayment customers if pricing at the level of the PCR.⁹²

Accuracy in assessing costs

- 4.5 The bottom-up methodology used in the DTC, when compared to the PCR methodology, has the benefit of being based on more up to date and granular information for forecasting direct costs in the supply of energy, and specifically in relation to policy and smart metering costs, from which the PCR has been found to have diverged. This is because the DTC methodology estimates each element of the costs individually, rather than relying on a market price as a proxy of these costs. Both the DTC and PCR adjust for suppliers to earn a rate of return on capital and provide headroom for competition. While both methodologies include indices to account for how costs may be expected to change over time, we note that the DTC uses more frequent and accurate sources of information in doing this than the PCR which is more reliant on published standard indices. Consequently, the DTC is able to remain more robust over time in reflecting changes in these costs. Consequently, the hybrid option presents a higher risk, relative to a bottom-up approach of the DTC, for a potential divergence in costs over time. 93
- 4.6 A bottom-up approach is time consuming and complex to create initially. We note that the bottom-up cost modelling approach is better suited to

⁹⁰ See paragraph 14.56 of the EMI Final Report.

⁹¹ See paragraph 14.251 of the EMI Final Report.

⁹² See paragraph 14.317 of the EMI Final Report. The PCR had an EBIT of 1.25% excluding headroom, and the weighted average EBIT margin across all tariff types under the price cap was around 5% including the headroom component.

⁹³ This is due to the reduced information used and the lower accuracy over time of the PCR methodology.

implementation by a sector regulator, as it requires a significant amount of work, time, information, expertise and liaison across the sector both to establish and to review to ensure ongoing accuracy. In the EMI Final Report, the CMA considered adopting this approach but concluded that it did not meet its practicability criterion when creating the PCR. This is because developing a price cap using a bottom-up methodology would have risked delaying the effective implementation of the remedy, thereby undermining the effectiveness of it in tackling the detriment in the short term.⁹⁴

4.7 However, this more accurate methodology is now available, through the DTC. As a result, we consider that the DTC methodology option would reduce the risks of the PCR underestimating or overestimating suppliers' costs at present and over time, and would therefore be more likely to represent the more accurate approach to estimating suppliers' costs.

Practicability

- 4.8 In addition to the above considerations, we consider that the practicability and complexity of any variation of the Order is a further relevant criterion for assessment. This is particularly the case because we intend that any changes to the PCR be implemented in time for the charge restriction period that begins on 1 October 2019. We consider this timeframe to be appropriate on the basis that it involves making amendments at the first opportunity to address our provisional finding (that the PCR is no longer meeting all its aims).
- 4.9 In terms of practicability in varying the Order, we consider that the DTC methodology option presents a lower risk than the hybrid option. The DTC model has been created by Ofgem following a rigorous and detailed process and, like the PCR, has its own internal consistency.⁹⁵ The proposed adjustments to the DTC methodology under the DTC methodology option, to reflect the specific costs associated with supplying prepayment customers, are not complex and can be made when substituting the DTC methodology for the PCR's in a simple manner. Changing the prepayment uplift is a simple substitution for the corresponding values used by Ofgem in its model and is necessary as the DTC does not account for prepayment customers. Non pass-through smart metering costs are recorded clearly in the DTC such that their removal is a simple task. Consequently, we are confident all our

⁹⁴ Paragraph 14.41 of the EMI Final Report.

⁹⁵ Internal consistency refers to the completeness of a price cap methodology, and the risk that in adopting parts of more than one methodology, there is a risk of either double counting or some under-recovery, from a differing approach to a complex sector.

proposed adjustments to the DTC to apply it to prepayment customers do not undermine the accuracy or internal consistency of the DTC.

- 4.10 In contrast, creating a new hybrid model for the PCR in a very short period of time would be a more complex and time-consuming task as a result of needing to combine the parts of two separate methodologies for estimating costs. In view of the need to complete this work within a short timetable for the purpose of implementing the change by 1 October 2019, this would involve at least some risk of inaccuracy and of unintended consequences.
- 4.11 In addition to considering a short-term variation of the Order, we have, in this review, considered the longer-term outcome for prepayment customers once the PCR expires. Our formal recommendation to GEMA concerning the longer term is explained in Chapter 5. The recommendation is that GEMA should protect prepayment customers beyond the expiry of the PCR. If Ofgem chose to provide such protection through applying the DTC to prepayment customers, and if we were to vary the Order to adopt the hybrid option as a result of this review, this would lead to a second change in methodology in relation to prepayment meter customers within 18 months.⁹⁶ Adopting the DTC methodology option therefore reduces the risk of suppliers and Ofgem incurring unnecessary costs in 2020 from repeated changes in methodology.
- 4.12 We also note that providing consistency in approach of the two price caps may have some further practical policy benefits, in terms of generating improved understanding among firms about the level and calculations for the price caps, as well as ensuring regulatory consistency in approach across the energy sector.

Impact on customers and suppliers

- 4.13 For the purpose of assessing the relative merit of the two options, we have modelled the impact on customers and suppliers if implemented in the current 1 April to 30 September 2019 charge restriction period. The hybrid option would result in an additional £45.80 per year for a typical customer, while the DTC methodology option would represent an increase of £49.
- 4.14 This means that, at present, the difference between the two options is approximately £3.20 per customer per year, which can be attributed to adopting Ofgem's methodology in a comprehensive form. While we note that this difference per customer may change in subsequent charge restriction

⁹⁶ First from the original PCR methodology to the hybrid approach and then to a version of the DTC on the expiry of the PCR.

periods (given the underlying methodologies in each option differ) the divergence in future periods between the two approaches is likely to remain small.⁹⁷ There is no certainty about either the exact magnitude (other than it is likely to remain small) of any difference or the direction of change in such future periods.

- 4.15 At present, Ofgem estimates that there are around 4 million prepayment meter customers covered by the PCR.⁹⁸ However, we expect the numbers under the PCR to decrease during 2020 as SMETS1 smart meters start to become interoperable and SMETS2 smart meters continue to be rolled-out, both of which will result in those customers ceasing to be covered by the PCR. Therefore, the total scale of impact on prepayment customers of the difference between the methodologies, on an ongoing basis, is difficult to quantify accurately, but we consider the overall impact to be limited as any divergence in future periods is likely to remain small (see previous paragraph), and as the market decreases in size over time.
- 4.16 We have considered how each option would impact on the different aims that that the Order seeks to achieve (see paragraph 3.18), specifically in addressing a substantial part of the detriment, while allowing an efficient supplier to earn a normal rate of return and compete under the price cap to the benefit of customers, in the manner set out in the EMI Final Report.⁹⁹
- 4.17 Based on our assessment of actual costs incurred by suppliers, and of the small and uncertain difference between the two methodologies, we consider that both options would achieve a similar balance between the different aims of the Order as set out in the EMI Final Report. Specifically, both would be effective in mitigating a substantial part of the detriment suffered by domestic prepayment customers arising from the Prepayment AEC and the Domestic Weak Customer Response AEC as envisaged in the EMI Final Report. We also note that both options, by virtue of addressing the underestimation in the current PCR methodology in full, would enable efficient suppliers to earn a normal rate of return (considering their prepayment tariffs in isolation) in the current charge restriction period, and are likely to continue to do so.

⁹⁷ This is because most costs components would be calculated on the basis of the same methodology under both options, the only material difference relating to the calculation of wholesale costs. However, as set out above in our discussion of wholesale costs in Chapter 2, while the PCR and DTC are based on different approaches to determining the appropriate level of wholesale costs, both approaches appear to be robust (with the difference between the two being no more than 1% of total bill), which means that they are likely to remain broadly aligned. ⁹⁸ Ofgem State of the Market Report, 2018.

⁹⁹ See paragraphs 14.26 to 14.28 and 14.250 to 14.275 of the EMI Final Report.

Provisional conclusion

- 4.18 We have considered two options for varying the PCR which, in principle, would lead to it meeting all its aims for the remainder of the PCR's duration. However, we consider that the DTC methodology option represents a lower risk of error when being implemented within a timeframe that enables the PCR to be adjusted so as to meet the next charge restriction period starting 1 October 2019. Accordingly, we have provisionally concluded that, on balance, the most effective manner to vary the Order is to adopt Ofgem's DTC methodology and adjust for the factors set out in paragraph 4.3(b). In reaching this provisional conclusion, we considered in particular the relative accuracy and practicability of each methodology, and the impact of each methodology on customers, suppliers and competition.
- 4.19 Specifically, we have provisionally found that:
 - (a) adopting the DTC methodology with minor adjustments reduces the risk of the PCR becoming less accurate over time, as it uses more recent and granular information than the original PCR methodology, and its implementation presents fewer challenges, costs and risks;
 - (b) while we expect some small divergence between the two approaches in the future (with the hybrid option currently £3.20 lower than the DTC methodology), this divergence is likely to remain small (although there is inherent uncertainty as to the exact level of such difference or direction of change); and
 - *(c)* this small and uncertain difference has to be balanced against the greater accuracy of the DTC methodology and impact on suppliers and competition.

Proposed implementation

- 4.20 Both the PCR and the DTC are calculated as the sum of a number of cost components (see in the electricity and gas supply licence conditions paragraph 28A.7 for the PCR and 28AD.7 for the DTC). In view of the provisional conclusion set out above, we propose to vary the Order by adopting Ofgem's DTC methodology, subject to adjusting it for the factors set out in paragraph 4.3, as follows:
 - (a) With respect to wholesale costs, network costs, policy costs and operating costs, we propose to amend the Order by providing that these cost components will be calculated pursuant to the methodologies set out in the electricity and gas supply licence conditions 28AD, that is the DTC

methodology, subject to the exclusion of non-pass-through smart meter costs. As the purpose of these cost components is to reflect the actual costs incurred by suppliers in supplying energy, we consider that any future changes to the DTC methodology that are objectively verifiable by Ofgem (for example with reference to out-turn costs) should also be made, for identical reasons, to the PCR. We expect Ofgem to ensure that, if a change to any of these cost components were to be specific to payment methods other than the prepayment segments, such a change would be implemented in a manner that would not automatically affect the PCR.

- (b) With respect to headroom and EBIT, we propose to reproduce the current DTC methodology in the Order, without allowing for future changes to the DTC methodology to impact on the PCR. As a result, the rate of return that efficient suppliers can achieve, and their incentives to compete under the level of the PCR, would remain as calculated in the DTC at present. We consider this to be appropriate as there is some degree of judgement about the appropriate level of EBIT and headroom that should be applied to achieve particular policy aims in the prepayment and default tariff / standard variable tariff segments. While both areas are subject to price caps, we note that it is not necessarily the case that competition will change in the same way in both these segments at the same time. Therefore, it may be appropriate for Ofgem to wish to vary one or both of these terms in relation to the DTC, while the CMA may consider such changes to not be appropriate for meeting the objectives of the PCR.
- (c) For the reasons set out above, we propose to retain the prepayment uplift as set out in the PCR, as the DTC does not include prepayment metering costs. Within the provision of the Order setting out the calculation for the prepayment uplift, we propose to use the consumer price index to determine changes in the prepayment uplift from 2015 to 2017 (as was the case in the original PCR methodology), and from 2017 onwards, to use the consumer price index including housing costs (CPIH).¹⁰⁰ This would ensure consistency with Ofgem's DTC methodology, which assesses changes in costs using CPIH, taking figures that start in 2017.

¹⁰⁰ Consumer price inflation including owner-occupiers' housing costs.

Timing of implementation

- 4.21 We aim to adopt a final decision in time for this change in methodology to be applied in calculating the level of the PCR for the next charge restriction period (October 2019 to March 2020).
- 4.22 Due to the procedural requirements for varying the Order, and the need for Ofgem to publish the new level of the PCR with sufficient notice before a new charge restriction period, we consider that there is no scope for giving effect to the proposed variation at an earlier date.
- 4.23 For the reasons set out further below, we also consider that it would be appropriate for GEMA to protect prepayment customers beyond the end of 2020, until the roll-out of smart meters is substantially completed. If GEMA were to do so, under the current Order, the PCR would come to an end on 31 December 2020 and any new charge restriction could begin on 1 January 2021. However, this is half way through a charge restriction period. We consider that this artificial split of the charge restriction period starting on 1 October 2020 and ending on 31 March 2021 could introduce unnecessary complexity for suppliers, and an unexpected tariff variation for customers. On that basis, we consider it appropriate to vary the Order to give the CMA the possibility not to apply the PCR in the charge restriction period starting 1 October 2020 for prepayment customers that will be appropriately protected by another charge restriction imposed by GEMA.

5. Protection for prepayment customers beyond the end of 2020

Introduction

- 5.1 The EMI Final Report provided for the PCR to be subject to a mid-term review commencing in January 2019 of the progress that has been made concerning the roll-out of smart meters.
- 5.2 The Explanatory Note to the Order said that the EMI Final Report proposed for the mid-term review to have the following potential outcomes based on the extent of the roll-out of smart meters:
 - (a) 'If the roll-out of smart meters was materially ahead of schedule, the CMA would consider whether to terminate the PPM cap early.
 - (b) If the roll-out of smart meters was broadly on schedule, the CMA would be likely to decide to take no further action.
 - (c) If the roll-out of smart meters did not appear likely to be completed by 31 December 2020, the CMA would consider whether to encourage GEMA to review the situation and take whatever action it considered appropriate.¹⁰¹
- 5.3 As noted above, the CMA has provisionally found a relevant change of circumstance to be that smart meters are not being rolled out as fast as was expected, that the roll-out programme is not on track to complete by the end of 2020, and we believe that it may be as much as two years behind schedule.
- 5.4 Moreover, as set out in paragraph 2.11 above, the CMA has provisionally concluded that the conditions of competition in the relevant markets for prepayment customers have not changed materially since the EMI Final Report. It follows that the justification set out in the EMI Final Report for protecting prepayment customers by way of a charge restriction remains valid until the substantial completion of the roll-out of smart meters.
- 5.5 For these reasons, the CMA considers it appropriate for prepayment customers to continue to be protected following the expiry of the PCR and until the completion of the roll-out of smart meters to the large majority of prepayment meter customers.

¹⁰¹ Explanatory Note to the Order, paragraph 75.

5.6 In line with the approach set out in the Explanatory Note, the CMA proposes to recommend that GEMA should take action to protect prepayment customers beyond the expiry of the PCR, starting as from 1 October 2020 (for the reasons set out above at paragraph 4.23) until the substantial completion of the roll-out of smart meters.

Scope of the recommendation

- 5.7 In line with our assessment set out above, we propose to recommend that GEMA provides protection for prepayment customers beyond the expiry of the PCR and until the roll-out of smart meters is substantially complete. One way to achieve this would be to prepare the DTC for all prepayment customers on standard variable and default tariffs, subject to adjustments to reflect the prepayment segments (as per the PCR following the proposed amendments).
- 5.8 In addition, there are two areas of the prepayment segments upon which we would recommend that GEMA considers undertaking additional analysis in advance of any decision on how to protect prepayment customers. These are:
 - (a) whether the headroom, currently in the DTC, would be effective in generating competition on price or service levels for prepayment customers. At present, we have found that competition in the prepayment segments has not changed significantly since the EMI. However, it remains unclear how this will be affected by the future roll-out of smart meters and this should be assessed at the relevant time; and
 - (b) whether the level of the prepayment meter payment method uplift and the allowances for their installation remain appropriate once the roll-out of smart meters has progressed significantly. For the reasons noted above, including the limited roll-out of smart meters to date, we did not consider it to be an appropriate time to carry out such an assessment as part of this review.
- 5.9 The CMA's provisional recommendation to GEMA is therefore the following:

The CMA recommends that GEMA should provide protection for prepayment meter energy customers after the expiry of the CMA's prepayment meter charge restriction until the roll-out of smart meters is substantially complete in line with its objectives and duties.

Within this context, the CMA also recommends that GEMA give consideration to any future changes of circumstance in light of the original aims of the PCR when setting the level of any replacement charge restriction.

6. Provisional conclusions and decision

- 6.1 For the reasons set out above in Chapters 2 and 3, we have provisionally concluded the following:
 - (a) The conditions of competition in the prepayment segments have not improved materially since the introduction of the PCR, and levels of overall engagement among prepayment customers are still low and, therefore, this does not amount to a change of circumstance.
 - (b) The roll-out of smart meters has not progressed in line with the initial projections on which the EMI Final Report was premised. Evidence shows that it is not on track to complete by the end of 2020 and we believe may be as much as two years behind schedule. Consequently, there will be a significant proportion of prepayment customers without a smart meter at the time the PCR expires on 31 December 2020, when the roll-out was expected to be substantially complete. Accordingly, we have provisionally found that the delay to the roll-out programme for smart meters is significant and represents a relevant change of circumstance.
 - (c) While we are aware that the DTC has only been in place since January 2019, we have not seen evidence that the co-existence of the PCR and DTC in separate segments of the markets has significantly affected the incentives of either suppliers or customers. Accordingly, our provisional finding is that the co-existence of the PCR and DTC does not amount to a change of circumstance.
 - (d) However, the introduction of the DTC is relevant for assessing the accuracy of the PCR, whether there have been any material changes in costs since the introduction of the PCR and whether, by reason of any change of circumstance, the PCR no longer remains appropriate and needs varying; and accordingly, the scope and magnitude of any such variation.
 - (e) Some of the costs that an efficient supplier is expected to bear in supplying prepayment customers have increased to a level materially higher than that reflected in the PCR methodology. There are two categories of cost where, due to changes since its design and introduction, the PCR is underestimating costs incurred which, together, amount to a change of circumstance:
 - (ii) policy costs have changed since the design of the PCR such that there is a downward bias in the PCR due to the difference between the OBR forecasts and out-turn for the base year, and we have found the DTC to be a more accurate estimate of policy costs than the PCR; and

- (iii) pass-through smart metering costs have changed since the design of the PCR such that these have increased to a level materially higher than the level allowed for in the PCR.
- 6.2 As a result of the changes of circumstance relating to policy and pass-through smart metering costs, our provisional conclusion is that the PCR is no longer meeting all of its aims, due to underestimating the costs incurred by efficient suppliers. Taken together, we consider that this means that the Order is no longer appropriate and needs to be varied.
- 6.3 The CMA has provisionally concluded that:
 - (a) in the short run, it should vary the Order to address the divergence between actual costs incurred by efficient suppliers and the costs included in the PCR. The CMA proposes to adopt the methodology currently used by Ofgem in its DTC, adjusted to take account of the specific costs inherent to the supply of energy to prepayment customers; and
 - (b) in the long run, the CMA proposes:
 - (i) to recommend that GEMA should provide protection to prepayment customers when the PCR expires; and
 - (ii) to vary the Order to ensure that if Ofgem plans to introduce separate protection for prepayment customers as from 1 October 2020, the PCR would end on 30 September 2020 in order for Ofgem to commence protection at the end of a charge restriction period rather than in the middle of such a period, as would be the case if the original expiry date were to remain.

Consideration of Ofgem's statutory duties

- 6.4 The variation proposed above would also vary suppliers' licence conditions.¹⁰² Accordingly, where the CMA is considering such a modification, we must have regard to the relevant statutory functions of Ofgem.¹⁰³
- 6.5 In particular, we do not consider that any aspect of the change in methodology proposed will have an adverse impact on suppliers' ability to meet all reasonable demands for gas and electricity supply (so far as it

¹⁰² The variation to the Order provides the details of these changes to supplier licence conditions, as the calculations in the Order are based on those in specific licence conditions.

¹⁰³ Section 168 (particularly paragraphs 2, 3, and 7) of the EA02 and paragraph 347 of the Market Investigation Guidelines CC3.

remains economical to do so), achieving sustainable development, security of supply or environmental concerns.

- 6.6 In having regard to Ofgem's principal objective, we have also considered the potential impact that our change in methodology may have on the interests of existing and future consumers, including vulnerable consumers. The PCR is already protecting prepayment customers, many of whom are, and are likely to be, on low incomes or otherwise vulnerable. While our change in methodology will result in increased bills for such consumers, the varied Order that we propose would continue to address effectively the detriment identified in the EMI Final Report. In view of the conditions of the competition that prevailed and continue to prevail in the prepayment segments, the PCR is likely to deliver very substantial savings for prepayment customers, of the same order of magnitude envisaged in the EMI Final Report. In addition, we note that it is not in the interests of prepayment customers for the PCR to be maintained at an artificially low level, as this may lead to suppliers cutting costs, with less competition and lower service standards. This would also increase the risk of efficient suppliers exiting the segments which is costly for customers. We consider that our provisional conclusions above are consistent with protecting prepayment customers' interests through ensuring the PCR is set accurately and that suppliers can earn a normal rate of return which incentivises competition beneath the PCR level. We consider that this outcome would generate the most suitable market to protect prepayment customers both now and in the future.
- 6.7 We have also considered the potential unintended adverse consequences that may arise from the options explored. We are content that the provisional decision to maintain the Order varied in the manner set out above is consistent with a need to minimise such potential unintended adverse consequences, for substantially the same reasons as those set out in paragraph 14.464 of the EMI Final Report.
- 6.8 Accordingly, in the paragraphs above we have balanced the potential unintended adverse consequences against the substantial benefit we consider will arise from the variation of the Order. In doing so, we have had regard to Ofgem's statutory duties and objectives and in particular, its principal objective of protecting the interests of existing and future consumers, wherever possible by promoting effective competition.

Provisional decision and notice of intention to vary the Order

6.9 In light of the considerations set out above, our provisional decision is to vary the Order as set out above and make a recommendation to GEMA for additional protection for prepayment customers. In accordance with paragraph 3.29 of guidance document CMA11, we hereby give notice of our intention to vary the Order.

6.10 Given that our proposed variation of the PCR would involve amending the Gas Supplier Standard Licence Conditions and the Electricity Supply Standard Licence Conditions, pursuant to section 168, paragraphs (2) and (7) of the EA02 we have had regard to the statutory functions of GEMA as well as to those matters to which GEMA may have regard by virtue of section 4AA(4) of the Gas Act 1986 and section 3A(4) of the Electricity Act 1989, and provisionally concluded that the proposed amendments would be reasonable and practical for the purpose set out in section 168 of the EA02.

Variation of the Order

- 6.11 With a view to varying the Order as set out above under Section 162 of the EA02, and pursuant to the procedural requirements set out in Schedule 10 of the EA02, we are now consulting on:
 - (a) a Notice of Intention to Vary the Order;
 - (b) the draft Variation Order, which would vary the Order, including its annexes;
 - *(c)* the draft Explanatory Note that would replace the original Explanatory Note to the Order; and
 - (d) the model that would replace the CMA's original PCR model.
- 6.12 Items (c) and (d) are intended to replace the equivalent documents published by the CMA on the EMI on the CMA website in 2016.
- 6.13 In making this Variation Order, we are aware that this would modify the licence conditions of energy suppliers, and consequently, we confirm that we have had due regard to Ofgem's objectives and duties in reaching this provisional decision.

Consultation

6.14 We are now consulting on our provisional decision and the documents listed at paragraph 6.13 above. Paragraph 7(2) of Schedule 10 of the Enterprise Act 2002, in conjunction with paragraph 3.33 of CMA guidance document CMA11, provides that the CMA should allow a 30-day consultation period in cases where the CMA intends to make changes to an order. 6.15 The CMA is interested in receiving views from stakeholders concerning this provisional decision, including and referring to evidence where appropriate. Responses should be sent to the following address and should arrive at the CMA by 8 July 2019.

remedies.reviews@cma.gov.uk

OR:

Energy Prepayment Review Competition and Markets Authority Victoria House (6th Floor South East) Southampton Row London WC1B 4AD

6.16 Following this consultation, the CMA will consider the responses received and the evidence and views presented and will assess the impact of those responses on its provisional decision before reaching a final decision.