

Impact Assessment Form

<p>Title: Delivering Faster and More Reliable Switching: decision on new switching arrangements</p> <p>Date: 12 February 2018</p> <p>Division: Consumers and Competition</p> <p>Team: Switching Programme</p> <p>Associated documents: Switching Programme: Outline Business Case – Business case and Blueprint phase decision</p>	Impact Assessment (IA)
	Type of measure: Retail Competition
	Type of IA: Final
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Summary: Intervention and options

What is the problem under consideration? Why is Ofgem intervention necessary?

Problem under consideration: Outdated and sub-optimal switching arrangements are directly and indirectly leading to consumer detriment. The current lengthy and unreliable switching arrangements cause many consumers anxiety and stress, as well as wasting their time and costing them money. These negative experiences, and resulting perceptions of the switching arrangements, can act as a barrier to consumers engaging more in the energy market, as the expected time, hassle, effort, or risk of switching is considered greater than the financial rewards. Where consumers do not engage with the market, for whatever reason, they end up paying more for the energy than they need to. Complexity and separation between gas and electricity switching arrangements also increase costs and stifle innovation in the market.

Through a comprehensive package of reforms to the end-to-end switching process, we want to reduce the transaction costs for the switching process, giving consumers' confidence that they can quickly and easily change gas and electricity supplier. We also want to ensure that the arrangements we put in place are fit for the future.

Rationale for intervention: A reliable, quick and efficient switching process is a fundamental building block of a well-functioning competitive market that provides good outcomes for consumers. We are leading the Switching Programme because the incentives on current market participants, complexity of the changes required and existing governance structures mean that the alternative of an industry led programme will not deliver timely consumer focused outcomes that we think must be achieved.

What are the policy objectives and intended effects including the effect on Ofgem’s Strategic Outcomes?

The Switching Programme’s objective is *‘to improve consumers’ experience of switching, leading to greater engagement in the retail energy market, by designing and implementing a new switching process that is reliable, fast and cost-effective. In turn this will build consumer confidence and facilitate competition, delivering better outcomes for consumers.’* This objective applies to current and future consumers.

We want to unlock the additional consumer benefits that can be achieved from a better functioning competitive energy market. To do this we aim to put in place a switching process that supports innovation and, by having in place a quick, reliable and hassle free process, facilitates other projects to increase consumer engagement.

We also want to reduce the direct harm to consumers by reducing delayed, unsuccessful and erroneous switches and by speeding up the switching process. We think that suppliers will respond to increased switching and likelihood of switching by competing harder and lowering bills, providing better service and developing innovative offers to attract new consumers and retain existing ones.

What are the policy options that have been considered? Please justify the preferred option (further details in Evidence Base)

Do nothing – The existing switching arrangements would be retained (*the counterfactual*).

Reform Package 1 - “Enhanced existing systems” (RP1) - The existing switching services (UK Link for gas and the Meter Point Registration Service (MPRS) for electricity) and enquiry services (the Data Enquiry Service (DES) for gas and the Electricity Central Online Enquiry Service (ECOES) for electricity) would be retained. The quality of industry address data would be improved through a one-off cleansing exercise and ongoing review of separately held gas and electricity data against a common address database, and two working-day switching for domestic consumers (three working days for non-domestic consumers), would be achieved through a series of changes to industry processes.

Reform Package 2a – “Reliable Next Day Switching” (RP2a) - The switching functions of UK Link and MPRS would be replaced by a single new Centralised Switching Service (CSS). In addition to a one-off cleansing exercise, industry data quality would be improved by a new Address Service that would match gas and electricity meter point data to a new a single GB address list that suppliers and Price Comparison Websites (PCWs) can rely on to accurately switch consumers. Changes to industry switching processes would enable switching at the end of the next working day for domestic consumers and two working days for non-domestic consumers. The existing enquiry services, ECOES and DES, would not be replaced as part of the Switching Programme.

Transitional regulatory switch speed requirements (starting at five working days before moving to the faster speed) would apply to both packages in order to protect reliability for consumers during the immediate period after go-live.

Preferred option - Monetised Impacts (£m)

Business Impact Target Qualifying Provision

Non-qualifying Provision

<p>Net benefit to consumers</p> <p>Consumer NPV figures are net of the direct costs expected to be passed through by industry.</p> <p>These monetised figures do not represent the full benefits to consumers. They exclude the benefits to consumers of encouraging and enabling greater competition and innovation in the market, which we have not been able to monetise. We expect these non-monetised benefits to be the most significant impacts of the reforms.</p>	<p>Direct only: -£111m to £161m</p> <p>Direct + illustrative indirect benefits: £227m to £1,069m</p>
<p>Net cost to the industry</p> <p>Direct NPV includes the net direct costs to the energy industry, following the pass-through of the majority of the direct costs to consumers.</p> <p>The indirect costs to the industry are primarily the inverse of the indirect benefits to consumers. This is a transfer that is expected to occur from suppliers to consumers as a result of increased switching, with consumers paying less for their energy consumption. The figure also includes a cost to suppliers of processing additional switching activity.</p>	<p>Direct only:</p> <p>-£46m to -£28m</p> <p>Direct costs/benefits + illustrative indirect impacts:</p> <p>-£1,119m to -£435m</p>
<p>Explain how the net benefit was monetised, NPV or other</p> <p>The NPV was calculated in 2017 prices, with an assessment of impacts over an 18-year appraisal period, from 2018 – 2035 inclusive. This appraisal period is based on an assumed three-year build and implementation phase followed by 15 years of operation of the new arrangements. Both transitional and on-going costs have been discounted.</p>	

Preferred option - Hard to Monetise Impacts

Describe any hard to monetise impacts, including mid-tem strategic and long-term sustainability factors following Ofgem IA guidance

In a market facing rapid technological change, including the roll-out of smart meters, we are seeing increased market entry, the rise of new non-traditional business models, and the offering of new products and services. While we cannot predict where the innovation of the future will come from, we consider that a three-week switching process will hold back innovation and act as a disincentive for new entrants. By investing in a new central system and implementing new processes that are fit for the

future and flexible to change, we will be ensuring that the switching arrangements do not act as a block on future transformative innovation in the market. More reliable and faster switching will unlock innovation, creating more competitive pressure and improving outcomes for consumers, both in terms of price and quality of service. This important benefit has not been monetised due to the difficulty in valuing the potential future innovations that are unknown at this point, as well as the difficulty in assessing whether other barriers may stand in the way of these developments.

The efficiency savings from newly harmonised systems and, in some cases automated, processes ought to have been reflected in our estimates for the net costs to industry of the reforms. However, we are aware that some industry participants found it harder to provide monetised estimates of the benefits than the costs. As a result, we expect that these benefits have not been fully monetised.

The introduction of faster switching, along with other process changes such as 'one-fail all-fail' for a dual fuel switch, should improve consumers' experiences of switching, leading to increased utility as a result. We are unable to place a monetary value on this increased utility.

Increased consumer engagement in the market, particularly by currently disengaged consumers, should lead to more competition, with suppliers potentially seeking to differentiate themselves through lower prices, improved customer service, and a wider offering of innovative products and services. We have not sought to quantify or monetise these impacts, but they have the potential to dwarf the impacts that we have monetised. This is because increased competition can benefit all consumers in the market, and not just those that proactively engage. Our illustrative break-even analysis shows that an average reduction to households' annual energy bills of just one pound through increased competition would more than offset the total gross costs of the reforms that we expect industry to pass through to consumers. This is before we consider any of the monetised benefits to those consumers that do engage.

Key assumptions/sensitivities/risks

Through our Switching Programme we are seeking to bring about lasting improvements to consumers over the long term, in what we recognise is a market that is going through significant change. As a result of these circumstances, there is substantial uncertainty over the exact nature and scale of impacts that will result from each element of our chosen reforms. Coupled with the challenges of taking a long term view, we have imperfect data on the costs to industry of delivering our reforms and significant uncertainty surrounding future price developments. In the face of such uncertainty, we have adopted a number of mechanisms within our analysis to test the conclusion that our chosen reforms will ultimately deliver net benefits for consumers. These mechanisms are:

- Identifying ranges for monetised direct costs and benefits of the reforms
- Using sensitivity analysis to test three key assumptions
- Developing scenarios to demonstrate the impact of differing levels of increased consumer engagement
- Engaging and consulting with industry participants on the assumptions (see Appendix 2) and methodology described in this document.

Through these different approaches, we are able to test that our reforms will deliver net benefits to consumers under a range of plausible assumptions and scenarios, or when the future state of the market turns out to be quite different to how it is now. A brief summary of our approach to sensitivity analysis is set out below.

Sensitivity analysis: To test the impact of our key assumptions on consumer net impacts we developed three sensitivity tests. These are described in detail in Appendix 1 and are summarised below:

- *Sensitivity analysis test 1 - Delay to the programme*: Based on the assumptions used, our analysis revealed that our preference for RP2a over the alternatives, including taking no action, would be unaffected by an increase to the implementation timescales by a year (a one-third increase).
- *Sensitivity analysis test 2 – Financial rewards from switching are greatly reduced*: we have repeated the test from our consultation IA that assesses the impact on our monetised analysis of reducing the assumptions for savings from switching by half. Within this test our assumptions for the savings from switching are half what they have been on average over the last few years. The analysis demonstrates that, even if the price differentials in the market are greatly and permanently reduced, our case for implementing RP2a remains robust.
- *Sensitivity analysis test 3 – improving data quality has less of an impact on reliability*: Despite reducing the impact of our data quality reform, our analysis provides a high degree of confidence that the initial five working-day switch in our transitional phase, will not lead to a net increase in erroneous switches under our preferred option, RP2a. This impact will be tested before moving to next working day switching.

Summary of impacts

The table below summarises, at a high level, the range of impacts that can be expected to come from our chosen option, RP2a. The coloured shading indicates how each of the impacts has been assessed within the IA. Most of the impacts in the table above are universal to both reform packages, while they vary in their scale. The main exceptions to this are those related to establishing and operating a CSS which would not occur under RP1.

Orange = monetised **blue** = illustrative monetisation **green** = non-monetised

		Costs	Benefits	
Direct	Industry	Programme, delivery, and post-implementation costs	Efficiency savings from automation/harmonisation	
		Capital expenditure (eg investment in new systems, staff training etc)	Resource savings from reduced exception handling	
		Data migration and cleansing exercise		
		Operational expenditure (eg IT resilience, additional staff, capture of new data items etc)		
		Central coordination and assurance		
	Consumers	<i>(direct net costs passed through by suppliers)</i>		Increased utility from improved switching experience
				Bill savings from increased switch success rate
				Reduction in harm from reduced ESs
				Reduction in harm from reduced delays
				Bill savings from faster access to improved terms
	Public sector		Programme and delivery costs	Easier access to better quality data
			Ongoing DCC price control management	
Indirect	Increased consumer engagement	Loss of revenue to industry	Bill savings to consumers	
		Operational cost to industry		
	Enabling innovation		Enabling innovation of product and service offerings by enabling faster switching and introducing a new single central system that is faster and easier to adapt	
	Increased competition		Improved customer service	
			Downward pressure on prices	
			Increased efficiency	
		Increased choice		

Summary of consumer impact analysis

Options	Main effects on Ofgem objectives	Net monetised direct consumer impacts ¹	Potential consumer savings from increased engagement	Summary of non-monetised benefits
RP1	It does not achieve the objective of improving consumers' experience of switching as reliability issues with the switching process would not be fully addressed. It also doesn't deliver a harmonised process that is capable of adapting efficiently to future requirements.	Central: £41m Range: -£73m to £129m		Expected to have the smallest impact on consumer engagement due to the reliability issues it could generate. The resulting benefits of increased competition are also therefore expected to be the lowest for this package. Retention of existing separate systems, processes, and governance could stifle future innovation.
RP2a	Fully meets Switching Programme objectives	Central: £38m Range: -£111m to £161m	Scenario 1: £339m Scenario 2: £511m Scenario 3: £908m	Increased engagement in the market is expected to generate increased competition and consumer retention efforts, leading to a range of benefits to consumers across the market including downward pressure on prices and improved customer service. Introducing 'next working-day' switching and a new CSS that is capable of adapting to future requirements could enable future innovation.

¹ Assumes that industry costs are not fully passed through to consumers. See Chapter 7 for further detail.

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1. Approach to the IA

Chapter summary

This chapter explains our approach to updating our impact assessment following consultation in September 2017, and summarises the main areas where changes have been made.

Updating the IA

1.1 This document is an update to our impact assessment published for consultation in September 2017. The analysis presented has been updated to reflect information and evidence provided to us by consultees. We have also refined our approach and a number of assumptions following further analytical review. In addition to presenting the updated numbers and findings throughout the IA, we have also set out where the analysis has changed and why. In general, we do not repeat details of the analytical methodology or assumptions where they are unchanged following the consultation. The two exceptions to this are our assumptions for baseline switching volumes and the savings from switching. We explain below why it has not been possible to make changes to these assumptions at this stage. We will update our analysis so that it can be published alongside the next iteration of our business case in 2019, but this document represents our final stage impact assessment.

Savings from switching

1.2 There are two elements of our analysis that look at increases in switching volumes, and as such they require an assumption for the average savings that consumers achieve from switching to a new supplier, or to a new tariff with the same supplier. Within the analysis of direct impacts, we estimate the volume of additional switches that would be generated by improved reliability. In our illustrative assessment of the indirect impacts, we consider different scenarios for how our reforms may lead to increased consumer engagement and increased switching as a result.

1.3 We set out in our consultation IA a series of modelling assumptions for the savings that would be achieved by consumers on average when they switch. These assumptions were based on a review of the price differentials that have existed in the market in recent years, rather than necessarily being a statement of expectations of the future shape of the market. Since we published our consultation the Government announced its intention to pass legislation that will require Ofgem to introduce a temporary price cap on default tariffs in the market, which may be in place until the end of 2023 at the latest. This can be expected to lead to a reduction in the average price of default tariffs in the market, and as a result the differential between these and the cheapest deal in the market will be narrowed. While the cap is in place we expect the savings from switching will be reduced.

1.4 Although the price cap is only expected to be temporary, the potential for further interventions, coupled with more effective conditions for competition, may have a lasting impact on the prices suppliers charge for their default tariffs.

1.5 For these reasons, our assumptions which were based on data from recent years, are likely to overstate the savings that will be achieved by consumers who switch in future. However, as Ofgem has not yet designed the price cap, we do not have any information on what level it might be set at. It is therefore not reasonable to attempt, at this stage, to predict what the price differential in the market will be once the cap is in place.

1.6 In the absence of any information on how the price cap might be designed, we are not able to update the assumptions we have made regarding the savings from switching.² While this is not optimal, we are convinced that our conclusions are robust to any reasonable level that price differentials in the market may fall to, either due to a price cap on default tariffs or increased competitive pressure. We have used our sensitivity analysis of the monetised impacts, together with our qualitative assessment of the non-monetised benefits, to demonstrate that our decision is not sensitive to fluctuations in the financial rewards that are available from switching:

- Our analysis demonstrates that the conclusions of our quantified analysis are not highly sensitive to the assumptions we make regarding the savings achieved from switching. In our sensitivity analysis, presented in our consultation IA and repeated in this document, we tested the impact of a significant reduction to the savings available to consumers. In this particular test, we chose to reduce the assumed savings by half for the full appraisal period. This analysis demonstrated that even with these much-reduced price differentials permanently in place, our conclusions would continue to be robust. The results of this sensitivity analysis are presented in Appendix 1.
- The non-monetised benefits of reforms to the switching arrangements are expected to be greater than the monetised impacts. As explained in Chapter 6, our reforms are designed with two important strategic goals in mind. Firstly, replacing the existing fragmented arrangements with a centralised system and governance arrangements will mean the market can more quickly and efficiently adapt to future change and innovation. The market will be more agile as a result. Second, by improving consumers' experiences and perceptions of the switching process, we will be lowering an important barrier to consumer engagement. As the perceived costs of switching are lowered, a greater proportion of consumers will be willing to take action and move away from expensive default tariffs. As this threat of increased switching becomes increasingly credible, suppliers will come under pressure to reduce the price of all their tariffs and provide a better standard of service, resulting in improved outcomes for all consumers – not just those who proactively engage. The benefits to consumers of this increased competitive pressure are expected to outweigh the total costs of the reform. To illustrate this point, the total gross costs we expect to be passed through to consumers, before taking into account any of the monetised benefits, would be equal to around £0.60 each year per household on average over our appraisal period. We are confident that the downward pressure on prices caused by increased competition in the market will more than offset this cost. Our assessment of these wider competition benefits is set out in Chapter 6.

² Full details of all our modelling assumptions are in our assumptions log, which can be found in Appendix 2.

Baseline switching volumes

1.7 We have not made any changes to our assumed counterfactual as set out in our consultation stage IA.³ This includes the assumptions we have made for the baseline levels of switching in the market, which we assumed to be equal to 2016 volumes on average across our appraisal period.

1.8 There are two developments in the market since our consultation stage IA that led us to consider whether these baseline assumptions should be adjusted. Firstly, the level of switching in the market has continued to rise since the analysis was conducted. Given the various interventions in the market that are in train to stimulate consumer engagement and competition, we have good reason to believe this increase is not a temporary phenomenon, and as such, our long-term baseline volume may have been set too low. Second, the incoming market-wide price cap for default tariffs could lead to a temporary dampening of consumer engagement. Ofgem will consider this potential risk as it takes forward work to design and implement the price cap.

1.9 Increasing the baseline switching volumes would increase our estimates for the direct benefits of the reforms. While we expect it may also lead to a smaller increase in the direct costs, the data provided to us by industry participants does not enable us to estimate this change in costs with sufficient confidence. As our data for the costs for the reforms were gathered on the basis of 2016 switching volumes, we have considered it prudent to retain that assumption. This approach is also consistent with our decision not to update the assumptions in the IA to reflect the planned price cap on default tariffs.

Summary of changes to the analysis

The options

1.10 Our consultation stage IA assessed the costs and benefits of four reform packages (RP1, RP2a, RP2, RP3). It proposed that RP2a would deliver the most positive outcome for consumers over the long term. The majority of consultees agreed with this view, with a small number recommending that we pursue the less ambitious RP1. With little support for RP2 or RP3, these two packages have been removed from our shortlist, and are not assessed within this updated IA.⁴

Direct net costs to industry

1.11 We have updated our estimate of industry costs. We describe the changes in Chapter 3. The changes fall into the following categories:

- Updated reform package policy: For example, costs have been added for increased design, build and test costs for the CSS linking to both the DTN and IX Network.

³ Chapter 2 of our [Consultation Stage IA](#) sets out the details of our assumed counterfactual.

⁴ For completeness, we present the results for all four reform packages in the economic case in our OBC document, which acts as a complete record of the approach we have taken to reach our final decisions.

- Better information on existing policy: For example, removal of some MAP, MOP and MAM costs that we do not consider will be incurred in practice and amending TPI costs following a review of our assumptions with PCWs.
- Improved assessment of uncertainty: Reviewed and amended cost ranges used to derive a high and low case for industry costs.
- Error correction: Added central assurance and PMO costs for RP1 and fixed material error in treatment of network costs for providing consumer enquiry services.

Benefits to consumers

1.12 Based on feedback received through our consultation, as well as our own internal review of the analysis, we have made changes to a small number of other assumptions, meaning that the estimated value of each of the direct benefits has been adjusted. In particular, these changes include the following:

- We have changed the way we valued the harm to consumers caused by a delayed switch. We identified that our original approach to value the time cost to these consumers did not fully capture the inconvenience and frustration that they face. The change we have made has increased the estimated benefit of reduced delays.
- We identified that we had likely overstated the impact of our reforms on the number of rejected switches, particularly in the case of electricity switches. We have revised this benefit downwards.
- Feedback from consultees highlighted that we had overstated the benefit that may be derived by consumers from having faster access to improved terms. This was because one of our assumptions was not consistent with supply licence conditions. The value of this benefit has been reduced.

1.13 These adjustments are explained in more detail in Chapter 4. As outlined above, our monetised analysis of the benefits to consumers has not been updated to reflect the planned introduction of a temporary price cap on default tariffs. Without any details available on how the price cap will be designed, we are unable to make sufficiently informed adjustments to our assumptions. Further, with the cap expected to be temporary, and fast and reliable switching considered by Ofgem to be a condition for effective competition that would need to be achieved for the cap's removal, there may be limited overlap between the price cap and operation of the new switching arrangements.

Appraisal period and profile of impacts

1.14 The costs and benefits of the reform packages are considered over an 18-year assessment period from 2018 to 2035 inclusive. Despite some challenge raised by consultees over the uncertainty this time period generates, we are clear that it is important we assess the benefits of the investment over the full expected life of the assets procured. On this basis, we have worked on the basis that the new CSS within RP2a will be in operation for 15 years without requiring major upgrades. Compared to the lifespan of existing comparable industry

systems, this assumption appears reasonable. The appraisal period for RP2a therefore remains unchanged from our consultation stage IA.

Figure 1.1: Summary of assessment period for RP2a

Impacts	DLS / Enactment	DBT and Go- live		5WD switching – and move to next WD switching	Next WD switching fully operational			
	1 2018	2 2019	3 2020	4 2021	5 2022	6 2023	18 2035
Ofgem programme costs								
Industry programme costs								
Industry transitional costs								
Industry post-implementation costs								
Ongoing operational costs								
Ongoing benefits of faster and reliable switching								

1.15 For RP1 we have assumed that DBT and go-live take just one year, in 2019. As with RP2a, the ongoing costs and benefits of a fully operational RP1 have also been assessed over a 15-year operational period, only the period is assumed to begin and end one year earlier than for RP2a. The costs and benefits for RP1 in 2035 are therefore assumed to be zero.⁵

1.16 The appraisal period has been structured in this way for modelling purposes only. Any discrepancies between these assumptions and the programme plan⁶ reflects our intention to keep the appraisal period simple. The programme plan should continue to be the single source for when the different phases will take place. For each package, we have assumed that the initial transitional phase with one week switching would last for one year. This is a simplifying modelling assumption only and in practice we expect this to be 3 months.

1.17 Because costs and benefits occur over different time periods we have discounted these using the discount rate for social time preference (3.5%), as recommended by HM Treasury in the Green Book.⁷

1.18 As highlighted previously in our consultation document and supporting IA, we are looking at ways to deliver some of our reforms as early as possible, with the intention of bringing forward some of the reliability benefits for consumers. This push for early reliability

⁵ This represents a small change from the approach adopted in the consultation stage IA. Following our internal review of the appraisal period, we identified that the approach for RP1 was not consistent with our conclusion that the expected life of the assets would be 15 years. The impact of this change on the NPV for RP1 is minimal, due to the heavy discounting that is applied to the final year of our appraisal period.

⁶ See Management Case in Chapter 7 of our OBC for more information on our programme plan.

⁷ See pages 26-27 of HMT’s [Green Book](#).

improvements is led by the Switching Programme's Near Term Improvement workstream. We believe it is important that industry delivers improvements to reduce the current number of unreliable switches, such as erroneous switches, before we shorten switching timescales. This includes work on data improvement remedies that do not depend on the creation of the CSS. For simplicity at this stage, and in order to counter any optimism bias in delivery timescales, we have focussed on benefits that will be generated after the new switching arrangements are in place, ie from 2021 onwards. We have not sought to value the benefits of some of the smaller improvements that we are bringing forward. In practice, this is likely to understate the overall benefits to consumers as a result of the Switching Programme.

Key assumptions/sensitivities and risks

1.19 Through our Switching Programme, we are seeking to bring about lasting improvements to consumers over the long term, in what we recognise is a market that is going through significant change. As a result of these circumstances, there is substantial uncertainty over the exact nature and scale of impacts that will result from each element of our chosen reforms. Coupled with the challenges of taking a long term view, we have imperfect data on the costs to industry of delivering our reforms and significant uncertainty surrounding future price developments and consumer behaviour. We recognise that our quantification of the costs and benefits arising from our reform packages is challenging in this context.

1.20 For example, some of the remedies the CMA recommended for generating more competition for disengaged consumers have not yet been implemented and it is difficult at this stage to estimate how much more engagement they would achieve. Other ongoing reforms in the market such as the rollout of smart meters are also likely to generate some additional engagement in the market. It is therefore extremely challenging to reliably forecast what baseline switching levels will be in our counterfactual, in the absence of our switching reforms.

1.21 While rising switching levels in the counterfactual may reduce the scope for increasing engagement, this would increase the volume of consumers that would benefit directly from the reforms. The opposite would be true if baseline switching volumes were lower. Variations in switching volumes in the counterfactual are therefore not expected to harm the case for reform. In the absence of sufficiently robust cost data on the marginal cost of processing switches under the current arrangements, we have concluded it would not be reasonable to alter the assumption for baseline switching volumes. In taking this decision, rather than assuming that switching increases over time, we are taking a cautious approach that likely downplays the direct benefits of the reforms.

1.22 As highlighted in paragraphs 1.2 to 1.6 above, we have also not been able to update our analysis at this stage to take account of the proposed temporary price cap for default tariffs. As a result, the savings to consumers from each additional switch we hope our reforms will generate are likely to have been overstated. The impact of this on our estimates of the total net benefits to consumers will have been offset to some extent by the cautious approach we have adopted regarding baseline switching volumes.

1.23 In addition to the uncertainty inherent in a dynamic market, we recognise that there are both gaps in our evidence base regarding costs and benefits as well as challenges on how

we interpret data provided to us by industry. On this last point we note that the market participant incentives can be misaligned with those of consumers. One way that this can have a direct effect on our analysis is that parties may have provided pessimistic or optimistic responses to our requests for cost data. Given the profile of responses to our requests, which is biased towards incumbents, we think that there is significant potential for pessimism bias. We expect that our estimates of the costs of our reforms are therefore more likely to be overstated than understated. We have sought to address this as far as possible through a number of mechanisms including holding challenge meetings with industry parties to validate the data they provided.

1.24 Where we have material gaps in our evidence base we have developed cost models. An example of this is on the industry programme costs. In order to mitigate the risk of under/over estimation, we have varied our assumptions used within this analysis to develop ranges for these costs. This is explained further in Chapter 3.

1.25 To help show the impact of some of our key assumptions we have developed three sensitivity tests (see Appendix 1). The assumptions we tested are:

- Delay to the programme
- The financial rewards from switching are greatly reduced
- Improving data quality has less of an impact on reliability than expected

1.26 We have used this analysis to test whether our conclusions would continue to be reasonable if one of the above three circumstances came to bear.

Structure of this impact assessment

1.27 In Chapter 2, we set out our case for intervening in the market. This rationale for intervention and our underlying objectives have not changed following consultation. In Chapter 3, we summarise the direct net costs to industry and the public sector that we have estimated for each reform package, and highlight how this has changed following the consultation. Chapter 4 summarises the direct benefits that we expect consumers to see, for example from improvements to reliability, as well as time and bill savings. Chapter 5 presents the findings of our illustrative analysis on the indirect consumer benefits that could be achieved based on three scenarios around increased consumer engagement.

1.28 In Chapter 6, we describe the significant additional non-monetised benefits that we think consumers would receive from our reforms. In Chapter 7, we bring together our analysis of monetised impacts and present the net consumer benefits of both the direct and illustrative indirect impacts. Chapter 8 presents our overall conclusion and decision.

2. Case for intervention

Chapter summary

In this chapter we describe the wider context in which our work on switching is taking place as well as the issues with the current switching arrangements that we want to fix. We then explain our rationale for initiating and leading the Switching Programme and our stated programme objectives.

The information presented in this chapter is repeated in the Strategic Case in our Outline Business Case that we have published alongside this document.

Problem under consideration

2.1. The outdated and sub-optimal switching arrangements that currently exist in the retail energy market are directly and indirectly leading to consumer detriment. The majority of consumers do not actively engage in the market and shop around for the best deal, meaning that they are overpaying for their energy consumption.

2.2. The reasons for this widespread lack of engagement are numerous and complex, and vary greatly between consumers, but the conclusion many disengaged consumers reach is the same: the financial rewards available are not sufficient to outweigh the expected transaction costs (eg time, hassle, stress, risk). By improving the end-to-end switching arrangements, the Switching Programme will improve consumers' expectations for the costs of engaging with the market, resulting in more switching and lower bills for consumers.

2.3. Ofgem analysis of the deals that were available in the market since January 2014 suggested that consumers on an average priced SVT could have saved around £260 on average over that period if they switched to the cheapest available fixed deal. In recent months, the price differential has consistently been above £300. In its Retail Energy Market Investigation the CMA estimated that domestic consumers as a whole paid an average of £1.4bn a year more than they would have done under well-functioning retail markets over the period 2012 to 2015, reaching £2bn in 2015.⁸ This analysis suggests that, on average, households have been paying over £50 each year more for their energy than they need to. Despite this, savings go unexploited and approximately 65% of consumers are on the more expensive SVT.

2.4. For those consumers that already engage with the market, more reliable and fast switching will directly benefit them by saving them time, hassle, and money.

2.5. In this section we consider in more detail the specific issues with the existing switching arrangements that we consider to be a problem, both for current and future consumers.

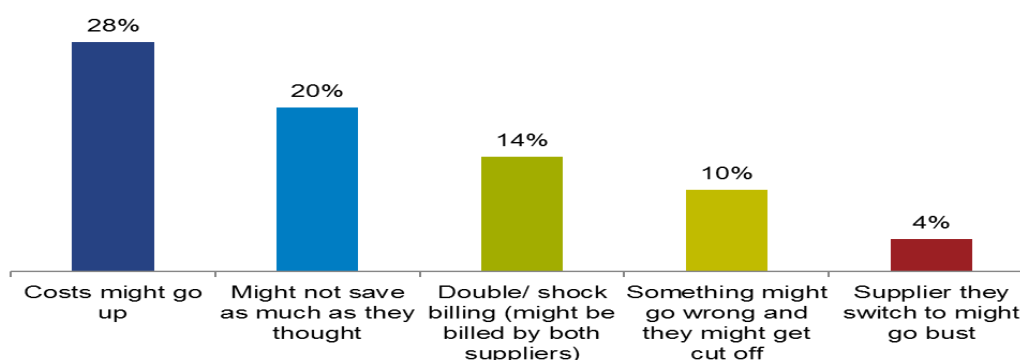
⁸ The [CMA](#) concluded its investigation in June 2016. It found that large numbers of domestic consumers do not engage in retail energy markets and as a result are charged higher prices by their suppliers. See page 628, para 10.109.

Unreliable consumer outcomes

2.6. We know that a key barrier to consumer switching is the expectation that something might go wrong. Though the majority of switches do go through without complications, the risk that something will go wrong for consumers is real, and the consequences can cause consumers significant worry, stress and frustration, as well as costing them time and money.

2.7. In response to Ofgem’s Consumer Survey, 41% of consumers interviewed were worried that something would go wrong when switching supplier.^{9,10} In response to the same survey, of those that have not switched supplier, 10% cited reliability as a reason for not doing so. Figure 2.1 below reports on the most common perceived risks these consumers identified. Although the primary fears are around the financial impact of moving to a new supplier, there are also significant concerns that the process will result in an adverse impact for them.

Figure 2.1: Most common perceived risks around switching energy supplier



Source: GKK (2017). Ofgem Consumer Engagement Survey

2.8. Evidence gathered by the CMA for its investigation into the Retail Energy Market also found that the switching arrangements are unreliable and can lead to delays, errors and costs, which, in turn, may have an impact on customer confidence and the propensity to switch.^{11,12} In particular, a third of consumers it surveyed reported having encountered one or more difficulties with their switch. One of the most common difficulties was delays to the process, cited by 11% of all those who switched.¹³

2.9. Further evidence from a recent survey commissioned by Energy UK¹⁴ showed that, although the speed of the process is important to some consumers, confidence in the reliability of the switching process is a more influential factor for encouraging consumers to switch energy supplier.

⁹ [Ofgem 2017 Consumer Engagement Survey](#), 41% of respondent agreed with the statement that “I worry that if I switch something will go wrong”.

¹⁰ This percentage went up by 5% compared to Ofgem Consumer Engagement Survey (2016).

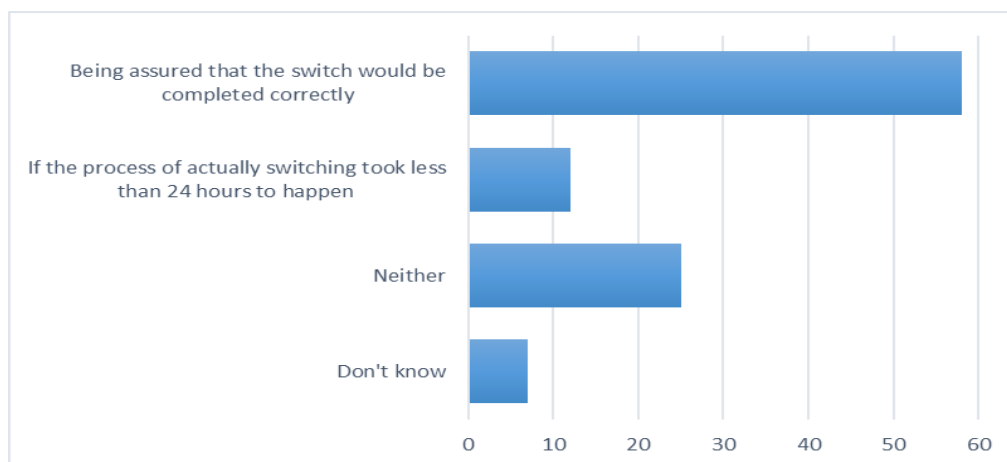
¹¹ See [CMA Final report](#), para 9.194.

¹² See [CMA Final report](#), paragraphs 9.200-9.208.

¹³ See [CMA Final report](#), para 9.194.

¹⁴ Figures are from YouGov Plc. Total sample size was 1,951 adults. Fieldwork was undertaken on 15-16 March 2017. The survey was carried out online. The figures have been weighted and are representative of all UK adults (aged 18+).

Figure 2.2: Responses to the question “Which of the following would be most likely to encourage you to switch your energy supplier in the next year?”



Source: Survey by YouGov commissioned by Energy UK (2017)

2.10. Consumers’ perceptions of there being some risk involved in the process are often justified, particularly given the potential impact on them if something does go wrong. In this IA, we have focused on three potential negative outcomes that can occur when switches are initiated. Firstly, a consumer could be switched in error without their consent (an erroneous switch). Second, a switch could take considerably longer than it is meant to (a delayed switch). Thirdly, a switch may ultimately be unsuccessful. The incidence, and impact of these outcomes are summarised in turn below.

Erroneous switches

2.11. An erroneous switch can occur when a consumer requests a switch and the wrong meter point is identified, and as a result a different consumer, who had not requested a switch, is transferred to a new supplier, or when a supplier switches a customer where there is no legitimate contract in place.

2.12. We estimate that around 0.96% of domestic gas and electricity switches were erroneous in 2016, which is equivalent to an annual volume of 74,000.¹⁵ In the non-domestic market, our estimate of erroneous switches is 1.5% of total switches for 2016, which is equivalent to an annual volume of 5,800 erroneous switches.¹⁶

2.13. While the volume of erroneous switches is small in percentage terms, the CMA concluded that they have the potential to cause material detriment to those who suffer from them. It considered it might also have a wider effect on consumer engagement given the impact it might have on consumers’ perceptions on the risks of switching going wrong.¹⁷ These findings are supported by those of recent research, commissioned by Ofgem, into the impacts on consumers of negative switching experiences, which found generally that *negative*

¹⁵ Based on data provided in response to our January 2017 RFI.

¹⁶ Based on data provided in response to our January 2017 RFI.

¹⁷ See [CMA Final report](#), paragraphs 9.200-9.208.

experiences made customers view the suppliers they dealt with more dimly than before' and 'their likelihood to engage and switch again was greatly reduced'.¹⁸

2.14. Erroneous switches can have a seriously negative effect on consumers when they do occur. In an erroneous switch, when a consumer requests a switch, the wrong meter point is identified, and as a result a different consumer, who had not requested a switch, is transferred to a new supplier. This will be confusing, and can be distressing, for the consumer that is unexpectedly switched to a different supplier, potentially receiving a 'sorry to see you go' letter or email from their original supplier as well as potentially a final bill. Where the wrong meter point has been switched it will also affect the consumer who requested the switch, as they would continue to be supplied by their original supplier, but could start receiving bills and potentially paying for the supply to two premises. For a consumer on a prepayment meter, it may lead to difficulty in topping up and in extreme cases to a consumer going off supply if they don't have the necessary information from the new supplier due to confusion over which account has switched.

2.15. It then can take a significant amount of time to identify an erroneous switch and, once it has been identified, suppliers have 20 working days to contact the consumer to confirm to them that they will be returned to their original supplier.¹⁹ The switch reversal is processed in the same way as a 'normal' switch. This means a lot of time can elapse from when an erroneous switch happens to when it is corrected, and this resource intensive process is expensive for suppliers to operate.

Delayed switches

2.16. Delayed switches are switches that, without valid reason (such as an objection or the consumer requesting a later switch date), are not completed within the existing 21-day supply licence requirement. There are a number of potential reasons for a switch being delayed, but our analysis suggests that many are caused by the need to verify data or gather further information regarding a consumer's address, meter point or meter type.

2.17. Based on our analysis of industry data for 2016, we have estimated that 105,000 switches are delayed each year due to issues with address data quality. This journey can be frustrating for the consumer as things haven't gone as they expected, but also because often it will involve further unexpected communication and effort from them. Our recent research into the impacts on consumers of negative switching experiences revealed that delays with switches can sometimes be very protracted affairs, where consumers have *'had to make numerous attempts to resolve or mitigate the issues involving regular chasing of the suppliers'*.²⁰ Also, while a switch is being delayed, a consumer is being prevented from moving to their chosen terms and may, for example, be needlessly overpaying for their energy consumption.

Unsuccessful switches

2.18. Unsuccessful switches are switches that are abandoned by the gaining supplier or the consumer before the switch takes effect. Most switches are abandoned by the consumer or

¹⁸ [Ofgem 2017 research on unreliable switching](#)

¹⁹ Requirement set out in the Erroneous Transfer Customer Charter which described in the SPAA and MRA industry codes. See for example [MRA MAP10](#), section 1.4.

²⁰ [Ofgem 2017 research on unreliable switching](#)

gaining supplier due to discrepancy between the information provided by the consumer and that held by the supplier or by central switching systems. Our analysis of data provided to Ofgem in response to our January 2017 RFI suggests that around 140,000 domestic switches were abandoned in 2016 due to issues with address data quality. Many of the consumers affected may try again and ultimately be successful, meaning they are able to achieve the desired savings, though on a delayed timescale, but they will have wasted time on the initial unsuccessful switch. Many others will be put off by the process and give up, or the problem will continue to prevent them from switching. These consumers miss out on the savings they would have achieved from a successful switch.

2.19. Our recent research into the impacts on consumers of negative switching experiences found that *'in the case of failed switches, customers had to put in a high degree of effort as they often had to investigate technical details, submit additional information and chase both current and old suppliers, acting as a go between in some cases'*.²¹

2.20. One of the main causes of these negative outcomes for consumers is inaccurate matching of meter point and address data. By improving the quality of this industry held data, and introducing arrangements that maintain this quality over time, we can significantly reduce the instances of these negative experiences for consumers.

Slow speed of switching

2.21. Currently, switching energy suppliers can take a significant amount of time – on average around two to three weeks but in some instances much longer. Even when the process works well, it is slow compared to other sectors such as mobile telephony, where switching takes one or two days currently and, following a recent decision from Ofcom,²² will be within one working day from mid-2019; and banking, where switching is possible in seven working days.

2.22. It is also slow compared to some international markets such as France, where switching is possible in one day for electricity and four days for gas, or Australia, where changes are being made to enable switches for electricity to be made at the end of the following day. Faster switching (24 hours) in energy markets is also being proposed in a draft European Directive on common rules for the internal market.²³

2.23. The current long switching times are, in part, due to the existing arrangements for dealing with the statutory cooling off period (normally 14 days) and the relatively long window within which a losing supplier can object to a switch. Suppliers typically start a switch during the cooling off period but do not schedule it to complete until after the cooling off period has elapsed. This is to allow processes such as objections to complete and to handle any contract cancellations.

2.24. The long switching process is likely to reinforce consumer perceptions that switching is complicated and not worth the hassle, which is likely to put some consumers off. In response to Ofgem's Consumer Engagement Survey, 27% of those interviewed considered that

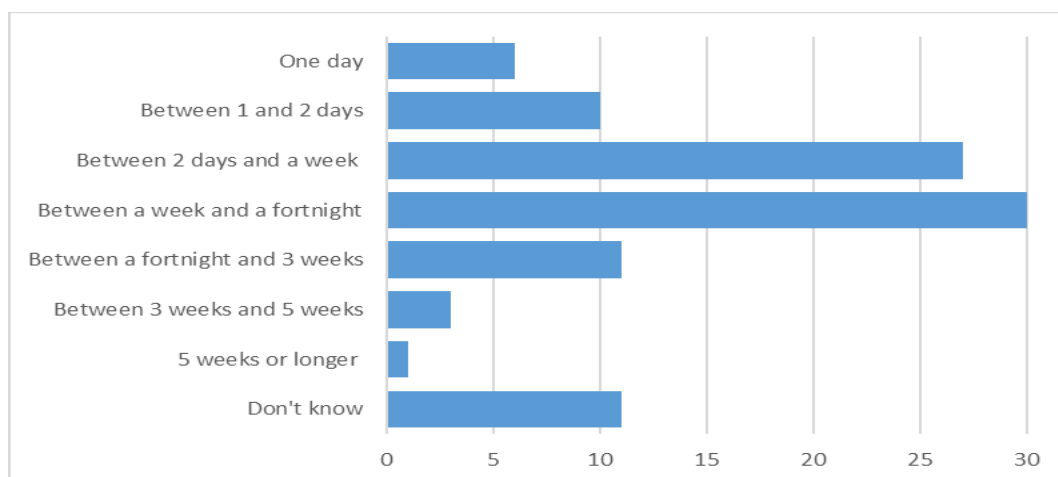
²¹ [Ofgem 2017 research on unreliable switching](#)

²² [Ofcom, Decision on reforming the switching of mobile communication services, December 2017.](#)

²³ See Article 12 of the [Proposal for a Directive of the European Parliament and of the Council on common rules for the internal market in electricity \(recast\)](#)

switching energy supplier would take too long,²⁴ and 46% of those interviewed considered switching a hassle.²⁵ Further, in response to a survey by Energy UK,²⁶ less than 5% of consumers considered that a switch time of greater than three weeks would be acceptable, while over 40% felt that it would not be acceptable for a switch to take longer than a week. Responses to this survey question are set out in Figure 2.3 below.

Figure 2.3: Responses to the question “Thinking about the switching process described above, what do you think would be the longest acceptable amount of time for this to happen between first requesting the switch, to having the supplier changed?”



Source: Survey by YouGov commissioned by Energy UK (2017)

2.25. Empirical evidence from a study of eight markets, including electricity, showed that the expected switching time has a statistically significant and negative effect on the probability of switching – longer expected times to switch discourages both searching around for other deals and switching.²⁷ The probability that consumers would search and switch is at its highest point when it takes no time to switch, and falls as expected switching time increases. An earlier study also found that the anticipated length of switching time has a negative, significant estimated effect on probability to search, switch, and search and switch.²⁸

2.26. Once a consumer has chosen to switch, the slow speed can still put them off completing the process. Past research by Consumer Futures suggested that approximately 7% of consumers cancelled switches part of the way through the process, with a small number citing delays in the process as their reason for doing so.²⁹

2.27. Despite consumer perceptions of complexity, the vast majority of the current three-week switching period is not used for any particular activity. Condensing this process will

²⁴ [Ofgem Consumer Engagement Survey \(2017\)](#), page 52.

²⁵ 46% of respondents agreed with the statement that “switching is a hassle that I have not got time for.” Ofgem Consumer Engagement Survey (2017). Questions 121.

²⁶ Figures are from YouGov Plc. Total sample size was 1,951 adults. Fieldwork was undertaken on 15-16 March 2017. The survey was carried out online. The figures have been weighted and are representative of all UK adults (aged 18+).

²⁷ Waddams Price and Zhu, Empirical evidence of consumer response in regulated markets, 2016.

²⁸ Waddams Price, Webster and Zhu, Searching and switching: Empirical estimates of consumer behaviour in regulated markets, December 2013.

²⁹ Consumer Futures, Switched on: consumer experiences of energy switching, January 2013.

improve consumers' experiences and perceptions of it, which we expect to lead to greater levels of engagement.

Inefficient and outdated switching and governance arrangements

2.28. The existing switching arrangements are based on processes and systems that operate differently for the gas and electricity markets and have remained largely the same since the late 1990s. Adjustments to the arrangements have tended to be made piecemeal, meaning they are not as efficient as they could be. They can also often require manual intervention to ensure a switch is completed as intended, which can add costs that will ultimately be borne by consumers.

2.29. It is problematic that these outdated and fragmented arrangements are no longer compatible with how consumers view and seek to interact with the market. This can lead to negative consumer experiences, and unnecessary costs being incurred by the industry.

2.30. One element of the arrangements that is out of step with the requirements of suppliers and consumers is that switches for gas and electricity are processed separately, and have different processes.

2.31. The separate gas and electricity switching arrangements mean that a customer who has requested a dual fuel switch will end up with two different suppliers where there is a problem with switching one of the fuels. This is because the separation of the gas and electricity switches means that one may go through successfully while the other fuel fails. This is an unacceptable outcome for consumers and will mean they are unable to benefit from the dual fuel tariff that they had signed up to. A situation of this sort will take effort on the part of the consumer to resolve.

2.32. From an industry perspective, operating separate gas and electricity switching arrangements is inefficient, and will lead to unnecessary cost. We would expect that having one single system and process for both fuels would lead to significant efficiency savings over the long term.

2.33. In addition, we believe that the existing arrangements could make it more difficult for the industry to facilitate innovation and adapt to change. While each existing industry system is individually believed to be capable of being adapted to deliver next-working-day switching and of further adapting in the future, the underlying technologies are very different, meaning that they have different strengths and different constraints. This means that the process of making changes to switching in the future would continue to be fragmented between gas and electricity, with ongoing duplication of the costs of change and the continuing difficulty of getting two governance processes to move in step. The existing separate governance regimes would also make it extremely difficult to drive change in both systems and sets of processes in the same way, and to the same timescales. We believe that it is essential to put in place registration and switching arrangements that will be capable of adapting quickly and efficiently to change. A continued reliance on the current fragmented systems and governance processes will not deliver that.

2.34. There are a number of changes either ongoing or on the horizon that could reshape the energy industry. The rollout of smart meters, the increasingly important role of third-party

intermediaries, the move to half-hourly settlement and the potential need for greater demand-side flexibility are just some of the important developments that may change the way consumers engage with their energy supply.

Rationale for intervention

2.35. The evidence presented above suggests that the current switching arrangements can deter some consumers from engaging in the retail energy market and switching. We think that these issues can be fixed, and it is essential that we do so as we consider fast and reliable switching to be one of the necessary conditions required for competition to function effectively in the market.

2.36. Having the new Address Service to link gas and electricity meters to the same single address, and improving the quality of industry data would significantly reduce the number of switch attempts that result in an erroneous, delayed or failed switch. This will mean that consumers' experience of switching is more positive overall and would give the consumer greater confidence that they can switch both fuels reliably at the same time. Coupled with a much faster switching process, this would generate a direct benefit to those consumers that are already engaged in the market, allowing them to benefit more quickly from cheaper prices, while reducing the risk that something would go wrong.

2.37. A more positive switching experience, in terms of both speed and reliability for those who do currently switch, would also prompt more engagement from those who have decided not to switch because of the perceived risks and barriers, for example, once a greater volume of positive experiences are shared with friends and family. Evidence from our 2017 Consumer Engagement survey showed that 41% of those who switched tariff/supplier in the past twelve months received a recommendation from someone other than a salesperson.³⁰ Higher levels of switching than we would otherwise have seen would generate savings for consumers on their energy bills. This reduced friction in the switching arrangements is expected to be complimentary to other ongoing reforms in the market. We consider that the impact of such measures could be inhibited if the existing switching arrangements are retained.

2.38. In turn, increased switching will exert additional competitive pressure on suppliers and provide them with greater incentives to attract new consumers and retain existing ones. They may seek to differentiate themselves by lowering their prices, improving their consumer service, and offering innovative new products and services. The stepping up of consumer retention efforts would result in more consumers switching tariffs with their existing supplier, generating further savings. These potential indirect, dynamic competition benefits might be significantly greater than the – still important – direct consumer benefits from more reliable and faster switching.

2.39. In addition, the current systems and processes, largely designed in the last century, potentially act as a brake on innovation. The energy market is facing rapid technological change, including the roll-out of smart meters, the move to half-hourly settlement, increased micro-generation and the growth of peer-to-peer networks, where consumers are connected

³⁰ [Ofgem Consumer Engagement Survey \(2017\)](#).

directly to local renewable producers. We are also looking at whether the existing 'supplier hub' arrangements in the market ought to be reformed to boost innovation and competition.³¹

2.40. We do not know how the supply market may change, but there are a number of models that could emerge. In particular, we can envisage a situation in the future where consumers may seek to contract with suppliers for relatively short periods of time, enabling them to be served by different parties for different aspects of their energy supply or on different days of the week. Consumers might want to power their houses from one supplier and their cars from another. It is possible that we might see the development of demand management services that source the most efficient energy for a consumer in real time. Customers might contract with one provider for energy costs, another for network costs and a third for metering costs. Any of these, or other changes, may happen over coming years, and could require changes in the way that registration data, and/or the switching process, is managed.

2.41. Through the Switching Programme we want to make sure that the switching arrangements keep in step with this dynamic energy market landscape and rapid technological change. Our new switching systems and processes should be designed to support these and other programmes of work, and also leverage the benefits of other changes where possible. In doing so we aim to create an efficient and effective set of switching arrangements that are flexible enough to support both current and future market requirements.

2.42. By introducing a single CSS that is designed with future change in mind, we will be ensuring that the both the central switching systems and supporting governance arrangements can quickly and efficiently be adapted to enable transformative industry innovation that was not anticipated when the existing platforms were developed. While the existing systems may be capable of adapting to the sorts of change we can currently foresee, it would be more difficult, more expensive, and slower to do this with two registration systems with separate governance arrangements that it would with just one.

Why Ofgem is stepping in

2.43. Ofgem initiated the Switching Programme as we consider that the problems identified above cannot be effectively corrected by market forces alone or an industry led programme.

2.44. A series of changes to industry codes would be required to speed up and enhance the switching journey. Each of these changes requires a combination of coordination and regulation, which we believe cannot be delivered by market participants.

2.45. Experience of the market to date suggests, for example in relation to the introduction of the new UK Link, that industry parties are unlikely to be able to coordinate and manage that process without significant oversight and assistance from a central body.

2.46. Further, as identified by the CMA in the Energy Market Investigation,³² we think that current industry governance arrangements do not work well in achieving timely change when there are substantial financial costs, which are unequally distributed between players.

³¹ [Ofgem seeks views on reforms to 'supplier hub' market arrangements](#), November 2017.

³² See pages 471-472 of the CMA Provisional Findings report.

2.47. With regards to the reliability of switching in particular, the existing industry codes governance arrangements³³ do not provide the appropriate clarity or incentives for individuals or groups of industry participants to improve the quality of industry address data. Though there have been several efforts over the years to cleanse this data, the quality of relevant industry data sets remains poor, and we expect that these problems will continue to arise without intervention and coordination by a central party.

2.48. Switching speed is largely determined by a series of accepted industry processes and practices; for example, the length of time that is allowed for a losing supplier to object to a switch, or the pan-industry accepted practice that switches are not completed until after the cooling-off period has elapsed. Amending these arrangements through changes to industry codes will in practice require a central authority to coordinate.

2.49. Making the switching process faster and more reliable would require significant changes to energy suppliers' IT systems as well as changes to existing central systems such as UK Link and MPRS. The costs of these changes are high and unevenly distributed between suppliers. Some parties would incur larger direct costs than others, for example if their IT systems are older and require more significant upgrades. Therefore, current market incumbents might not have the appropriate commercial incentives to deliver these pro-competition reforms given that the changes will incur costs for them.

2.50. All these factors taken together mean that we cannot expect faster and more reliable switching to be introduced through existing industry mechanisms. As signalled by our launch of a Significant Code Review,^{34,35} to make the changes needed to industry codes to deliver the programme, we consider that Ofgem is best placed to identify the best outcomes for consumers and take a leading role in making sure that they are achieved. Ofgem believes that fast and reliable switching is an essential building block for effective competition to thrive in the retail energy market.

Programme objectives

2.51. Our overarching programme objective is to:

'Improve consumers' experience of switching, leading to greater engagement in the retail energy market, by designing and implementing a new switching process that is reliable, fast and cost-effective. In turn this will build consumer confidence and facilitate competition, delivering better outcomes for consumers.'

³³ Industry code arrangements are currently being modified by Ofgem as a result of the findings from the Energy Market Investigation. See [Update on the implementation of the CMA Code Governance Remedies](#) published by Ofgem on 26 July 2017.

³⁴ Following consultation in June 2014 and the broad support of stakeholders, [we launched a Significant Code review in November 2015](#).

³⁵ The Competition and Markets Authority also recommended that Ofgem be given greater powers to influence the process for amending industry codes. In November 2016, we launched an initial consultation on the implementation of their recommendations. The full package of reforms is not expected to be implemented within the timelines necessary for the Switching Programme, and so is unlikely to affect our work directly. We are, therefore, continuing to plan on the basis that we will use our existing significant code review and licence modification powers to deliver changes to the switching arrangements.

2.52. During the Blueprint phase of the programme, we have developed a set of subsidiary objectives summarising what we aim to achieve through the Switching Programme. These are used both to communicate our aims to stakeholders and as a means of assessing the relative strength of different reforms we have considered during our Blueprint phase work.

2.53. The subsidiary objectives are:

1. To improve consumer experiences and perceptions of changing supplier, leading to increased engagement in the market, by delivering a switching service that:
 - a. Is more reliable, thereby reducing the instances of consumers being let down by delayed, unsuccessful or unwanted switches.
 - b. Offers consumers control over when they switch, including providing the capability of doing so as fast as possible, and by no later than the end of the following day after a consumer has entered into a contract.
 - c. Minimises any differences in consumer experiences of the switching process, to the extent that is possible, taking into account any physical constraints imposed by metering and issues relating to consumers' indebtedness.
2. To deliver a simple and robust system architecture design that harmonises business processes across the gas and electricity markets where possible, and is capable of efficiently adapting to future requirements.
3. To encourage more effective competition by minimising barriers to entry for new entrants to the market, including the extent to which a successful switch may rely on the actions of an incumbent, and by having appropriate safeguards in place where this is not possible.

2.54. We have used the analysis presented in this IA to judge how well the reform packages would meet each of our objectives and to inform our decision that RP2a should be implemented. A summary of this analysis is presented in Chapter 8.

3. Monetised direct costs

Chapter summary

In this chapter we describe our updated analysis of the monetised direct impacts of RP1 and RP2a that we have estimated for industry and the public sector. We highlight the key changes that we have made following publication of the consultation stage IA.

For industry, we assessed impacts for suppliers, DCC and the central service providers (eg the CSS provider and the CES provider), GTs and Xoserve, DNOs, ECOES, Meter Asset Providers (MAPs), electricity Meter Operators (MOPs), gas Meter Asset Managers (MAMs) and PCWs.

3.1. A summary of the direct monetised costs is set out in Table 3.1 below. We have developed a low, central and high case for these costs and the table below presents our central case. The cost ranges are described at the end of this chapter. In this table we have separately highlighted the costs for suppliers and DCC, and the central system providers it is expected to procure, as these have the greatest impact on our overall assessment.

Table 3.1: NPV of industry and public sector net costs by reform package (2018-2035, £millions)

	RP1	RP2a
Suppliers	152	180
DCC and central system provider(s)		141
Other	24	11
Total	176	332

3.2. We have estimated the net costs of each of the reform packages relative to a fixed counterfactual, which has remained unchanged from our consultation stage IA.³⁶ The costs shown are incremental to that counterfactual. Other key modelling assumptions that have changed since the previous iteration of this IA are set out within the relevant sections of analysis.

3.3. In Table 3.13 at the end of the chapter we show the costs for each market participant and compare this with the estimates that we provided in September.

3.4. Unless stated, the transitional costs are shown as discounted values as they can occur over several years. Where ongoing costs are shown as an annual cost they are not discounted. The 18 year NPV includes discounting for both transitional and ongoing costs.

³⁶ For full details of this counterfactual, see paragraph 2.1 in our consultation stage IA.

Approach to assessing direct industry costs

3.5. We expect industry to incur costs in implementing and operating each reform package, which would vary between packages and for each participant.^{37,38}

3.6. Our reform packages are expected to generate a range of costs for industry participants, which we have classified either as transitional costs (which relate to the investment needed to implemented the changes), or ongoing costs. The main industry impacts in these categories are summarised below.

Transitional costs:

- Upgrades to existing industry participants' IT capabilities so that they are able to interact as necessary with the new central systems.
- Design, procurement, build and testing of the new CSS and the Consumer Enquiry Service (CES).³⁹
- Programme design and engagement costs, including for Ofgem.
- Central delivery assurance costs.
- Training of staff to manage and deliver new procedures, including developing new scripts for call centre staff.
- Exercises to migrate data from the existing separate systems for gas and electricity into the new CSS as well as into MPRS, UK Link, ECOES and DES in preparation for go-live, as well as cleanse the data and match meter point numbers to a single newly procured premises address database.
- Post-implementation costs to monitor the new arrangements in live operation and deal with unexpected problems experienced after launch.

Ongoing costs:

- Operation of the CSS, including management of a support contact centre for CSS users and business as usual modifications to reflect user requirements.
- Operation of the CES.
- IT costs for industry participants to maintain and operate their new IT arrangements, including maintaining an acceptable level of IT resilience.
- Changes to staffing requirements to manage the new switching processes and for managing consumer interactions based on new processes and tighter timescales.
- Any reduction in costs for parties that are no longer required to perform services or for increased efficiency in the processes operated.

Accounting for uncertainty

3.7. We recognise that there are significant costs to industry and we have made extensive efforts to ensure that all those costs are understood as well as possible and included. Where

³⁷ While we expect industry to incur an overall net cost, these are likely to be distributed unevenly between individual participants. In some areas, for example linked to efficiency savings from harmonisation of gas and electricity systems and processes, we expect industry costs to reduce against the counterfactual. These benefits are incorporated within the overall costs reported in this chapter.

³⁸ We have described the requirements of RP2a for each market participants in the OBC, Appendix 6: Reform Package Summary Spreadsheet.

³⁹ This is a single, centralised service for consumers to find out the identity of their current supplier and the MPxN for the meter points at their premises. This information can be used by consumers to compare supplier offers and to switch reliably.

the costs have been difficult to obtain or verify we have adopted a consciously cautious approach to ensure that we were as far as possible mitigating the risk of underestimating these.

3.8. In addition, we have developed ranges for our cost estimates around our central case by varying the assumptions that we have made in order to ensure we appropriately reflect the level of uncertainty in our estimates. In response to comments raised on the consultation stage IA, we have reviewed the ranges that we have used and made some changes to improve the consistency of our approach. The effect of these changes is a small widening of the costs ranges. The changes we have made are described at the end of this chapter and the updated assumptions are shown in Appendix 2.

3.9. We have also refined our sensitivity analysis to understand better the impact of uncertainty on delivery risks. In this test we have modelled the impact of a one-year delay in implementing the programme (see Appendix 1).

Reform package optimisation

3.10. In the consultation stage IA, we set out options and proposals for several key policy areas. These related to objections, cooling off, meter agent appointment/de-appointment and the Meter Communications Provider (MCP) ID data item.

3.11. Following our review of responses (see OBC Appendix 1) we propose to retain the proposals described in September. For clarity, our proposals are:

- Cooling off: For RP1 and RP2a, retain requirement for previous supplier to offer consumer equivalent terms if they cancel with their new supplier during the cooling off period and decide to return.
- Objections: For RP1 and RP2a, include a one working day objections window for domestic consumers and a two working day objections window for non-domestic consumers.
- Meter agent appointment/de-appointment: Remove requirement under RP2a for CSS to send notifications of a switch to the gaining metering agents and for CSS notifications to be used in place of existing agent appointment and de-appointment processes.
- MCP ID: For RP1 and RP2, remove requirement for this data item to be included as a new data item in industry arrangements.

3.12. In the September consultation, we also asked for views on including an 'annulment process' for the losing supplier to be able to stop a switch when a consumer indicated that they did not have a contract with another supplier and also the ability of the losing supplier to object when the gaining supplier had indicated that the consumer was a new occupant of the premises (a 'change of occupancy objection'). As described in the OBC, we have included these elements within the design for RP2a.⁴⁰ We think that they will have value in helping to

⁴⁰ For RP1 we have retained the Customer Requested Objection process rather than the annulment process. As with RP2a, RP1 would include the ability to object when a CoO has been flagged in a switch request.

ensure that a consumer switches when they want to and in line with the regulatory and contractual requirements. We have not included specific costs linked to the annulment process or change of occupancy objections. However, as described in the OBC, we expect them to provide overall benefits for both consumers and suppliers.

Suppliers

3.13. We have updated our assessment of the net impacts for suppliers of our reform packages. The main changes that we have made to the analysis presented in the consultation stage IA are:

- Minor adjustment to remove costs for those suppliers that would no longer need to establish a DTN gateway as we intend that the CSS will now offer connection through both the DTN and the IX Network (see para 3.75 below for further detail).
- For RP1, we have included estimated costs for programme assurance and a central PMO (note that these costs are included under DCC costs for RP2a).⁴¹
- Correct several errors in the supporting spreadsheets.
- Qualitative assessment of including a five working day switch at go-live before transitioning to next working day switching.
- Qualitative assessment of the distributional impacts for non-domestic and smaller suppliers.

Summary of supplier direct costs

3.14. Table 3.2 below summarises the estimated net incremental costs of our reform packages for suppliers.⁴²

Table 3.2: NPV net supplier cost of RP1 and RP2a (2018-35, £millions)

	RP1	RP2a
Total transitional costs	65.7	111.7
Annual on-going net costs (undiscounted)	7.3	6.3
Total (18 year NPV)	151.5	179.8

3.15. For all reform packages, suppliers would need to invest in new IT systems/upgrade existing IT systems to process consumers' switching requests within the faster timescales assumed. They would also need to make changes to consumer contract data capture and switching processes including the way they would handle objections and cooling-off. Suppliers would incur one-off costs to train staff how to use the new systems. There would also be on-going costs associated with the maintenance of systems over the assessment period.

3.16. There was considerable difference between suppliers on their costs drivers. This depended on factors such as the flexibility and cost of amending existing systems, different levels of efficiency in implementing and operating new processes and design decisions around

⁴¹ We recognised that not all of these delivery costs will be borne by suppliers. However, give the current procurement stage, we do not want to provide an indication of the costs that we have estimated for specific third party services that would be expected to be sourced through a competitive procurement.

⁴² It includes adjustments to account for those suppliers that did not respond to our request for information as well as the adjustments that we have made to several supplier responses. Our approach to these adjustments is described in paragraphs 3.52 to 3.75 of the consultation stage IA.

automation versus using operational staff.

3.17. For RP1, total net costs for suppliers are expected to be the lowest of the reform packages. Most suppliers would incur one-off costs for amending IT systems to manage a shorter switching process of two working days for domestic consumers and three working days for non-domestic consumers as well as a shortened objection window.

3.18. By comparison to RP1, RP2a has higher transitional costs to set up the new interfaces and processes with the CSS, but is expected to operate at slightly lower ongoing costs. We think that this is as a result of efficiencies that suppliers will achieve through operating a harmonised gas and electricity switching process.

3.19. We consider that some suppliers may also benefit from additional cost savings under each reform package. These could result from fewer consumers contacting suppliers to report problems experienced and from the automation of functions that were previously done manually and/or in a less efficient way. As part of our RFI request, we asked suppliers to take potential cost savings into account when estimating the cost of our reform package. We recognise that many suppliers found this more challenging than identifying the costs of the proposed changes and that reported costs may therefore be overstated.

Qualitative assessment of transitional switch speed

3.20. We have decided to implement a transitional period after go-live where suppliers are expected to switch consumers in five working days unless the consumer chooses a longer switching period. This will allow us to check that our data reliability remedies have had the expected impact in relation to the rate of erroneous switches. We expect to move to next-working-day switching once we have confirmed that this will not have a detrimental impact on consumers.

3.21. We have not included a monetised cost for suppliers operating five working-day switching and then moving to next working-day switching in this impact assessment.⁴³ Our qualitative assessment is that suppliers are likely to incur costs in several areas. These include:

- Training staff to operate in a five working-day switching environment and then retraining them for the move to next working-day.
- Making changes to IT systems to alter the default timescales. We expect that most systems can be parametrised but that additional testing may be required at the faster operational speed.
- Ensuring that any consumer communications, eg websites messages, emails, letters and billing correspondence contain the correct information and are sent at the correct time.
- Ensuring that related services, eg metering agents, are appointed and exchange information in the required timescales to support a reliable switch experience for consumers.

⁴³ We did not request data on the transitional switching period in the January 2017 RFI. We do not think that it is proportionate to conduct an RFI at this point as this would delay the programme and the delivery of benefits for consumers. In our modelling of switch speeds, we have assumed that transitional arrangements would be in place for all reform packages.

3.22. By making our intentions clear at this early stage, we aim to help suppliers plan for these transitional arrangements in the most efficient way. We also recognise the importance of allowing suppliers sufficient notice of when the change from five working-day to next working-day switching will occur so that they can implement these incremental changes efficiently.

3.23. We will give further consideration to quantifying costs around the transitional switch speed approach in our updated IA that will be published alongside our Full Business Case in 2019.

Qualitative assessment of distributional impacts

3.24. We have considered how the reform packages are likely to impact non-domestic and smaller suppliers. These are the two groups highlighted by respondents to the September consultation. This qualitative assessment supplements our quantitative assessment (which considers the overall cost impact for suppliers).

3.25. We expect non-domestic and smaller suppliers to incur costs to implement and operate the new reform package. These parties, as with all suppliers, would be expected to fund any necessary changes through sales revenue and discretionary capital raising activities.

3.26. We note that many smaller suppliers contract for their back office switching services with third party providers. There are likely to be efficiencies for these suppliers in terms of implementing the changes. If a smaller supplier provides its own systems then the relative cost of making changes, compared other suppliers in the market will depend on the flexibility of their systems. These may typically be newer and easier to change than those of incumbent suppliers.

3.27. For non-domestic suppliers, we note the concerns from some respondents to the September consultation that the benefits for their consumers will be lower than for domestic consumers. We consider that RP2a will have benefits for non-domestic consumers in terms of data accuracy leading to more reliable switching and lower ongoing costs for suppliers.

3.28. In terms of switching speed, we note that a large proportion of the non-domestic market are supplied on fixed term contracts where the contract is agreed some time in advance of the proposed switch date. However, we think that there will be benefits for those non-domestic consumers that are on deemed or evergreen contracts (including evergreen roll-over contracts) and want to switch quickly. We also think that a fast switching process will help non-domestic consumers switch when they want to. For example, if there are problems during the switching process that need to be resolved, whereby a switch request needs to be re-sent, or there is a delay in agreeing contract terms with a new supplier. This increased flexibility in the timing of the switching process is likely to increase competitive pressure in the non-domestic market.

DCC and central service provider costs

3.29. We have updated our assessment of the net impacts for DCC of our reform packages.⁴⁴

3.30. DCC's costs include: programme costs, design and build of the CSS and CES, testing, business change as well as ongoing service management. DCC has also provided illustrative costs for additional services to help Ofgem understand the impacts of central coordination and assurance.⁴⁵

3.31. The main changes that we have made to the analysis presented in the consultation stage IA are:

- Add costs associated with design build and test for communications through two rather than one network (in the consultation stage IA we assumed that communication with the CSS would be through the DTN only).
- Updated transitional costs up to the start of the Design, Build and Test (DBT) phase in line with DCC's updated Business Case.^{46,47}

Consumer enquiry service (CES)

3.32. We have retained costs for DCC providing a CES, with the associated reduction in costs for GTs, Xoserve and DNOs for its service provision.

3.33. This is an area where we see value in consumers being able to obtain information on who supplies them and their MPxN details to help a switch go smoothly. We think that a single service would be both, easier for consumers to find and use, as well as more efficient to operate.

3.34. We are exploring whether there are alternative options for the delivery of this service and we will continue to work with industry and consumer representatives to identify the best option for consumers. However, we think it is important to represent with this assessment the potential cost savings of harmonising this service and we have therefore included the cost data from DCC.⁴⁸

⁴⁴ Our approach to assessing DCC costs is described in more detail in paragraphs 3.93 to 3.108 of the consultation stage IA.

⁴⁵ DCC was asked to provide costs for PMO, systems integration and assurance and these have been included in our assessment. In Chapter 7 of the Outline Business case we note that discussions are ongoing on the definition and responsibility for these functions.

⁴⁶ DCC's Business Case, published in February 2018, can be found here: <https://www.smartdcc.co.uk/about-future-service-development/switching-programme/>. Note that, as some of the costs presented in the Business Case were incurred prior to January 2018, the start of the assessment period, we have not included these in the IA. This is consistent with the approach taken in the September IA publication. We have also removed any contingency from these costs. We have tested the impact of adding the contingency back in through the high case ranges described at the end of the chapter.

⁴⁷ In providing its responses to all of the information requested, DCC has included margin of 15% for shared services and of 9.5% for the relevant portion of Internal Costs. We have included these as indicative rates only at this stage. Further work on DCC's margin will be undertaken and we expect to consult on our proposals in 2018. For the period up to the start of the Design, Build and Test Phase, covered by DCC's published Business Case, DCC's costs include margin of 12% for shared services and a 9.5% margin for relevant portion of Internal Costs which must be justified through DCC's price control submission.

⁴⁸ We note that if a CES was included in the design of RP1, this may reduce the costs of this reform package. We have not explored this proposal, for example who would deliver it and how it would be governed, with industry parties.

Summary of DCC direct costs

3.35. Table 3.3 below summarises the total net costs DCC estimated would be incurred for RP2a. There is no CSS or CES under RP1 and therefore no expected involvement for the DCC.

Table 3.3: NPV net costs for DCC (2018-35, £millions)

	RP1	RP2a
Transitional costs		48.9
Annual on-going net costs (undiscounted)		8.6
Total (18 year NPV)		141.3

3.36. For RP2a, we asked DCC to ensure that the CSS has the capability to operate the instant objections policy option as well as the one and two-working-day objection windows for domestic and non-domestic consumers respectively. The intention here is to avoid the CSS being a blocker to moving to a same-day switching process in the future. These costs have been included in Table 3.3 above.

Gas transporters and Xoserve

3.37. We have updated our assessment of the net impacts for GTs and Xoserve of our reform packages.⁴⁹

3.38. The main changes that we have made to the analysis presented in the consultation stage IA are:

- Minor adjustment to remove costs for GTs that would no longer need to establish a DTN gateway as we intend that the CSS will now offer connection through both the DTN and the IX Network.
- Correct several errors in our supporting analysis.

Summary of GT and Xoserve direct costs

3.39. Table 3.4 below presents net costs for gas transporters and Xoserve.

Table 3.4: NPV of net costs for GTs and Xoserve (2018-2035, £millions)

	RP1	RP2a
Transitional costs	4.6	7.1
Annual on-going net costs (undiscounted)	0.3	(1.2)
Total (18 year NPV)	8.1	(5.6)

3.40. Transitional costs for RP1 are lower than for RP2a as respondents considered that the scale of the required changes would be lower-cost to implement. Under RP1, Xoserve would retain its current role in managing switching and the consumer facing enquiry service.

⁴⁹ Our approach to assessing GT and Xoserve costs is described in more detail in paragraphs 3.109 to 3.115 of the consultation stage IA.

3.41. A significant proportion of transitional costs for both packages are linked to data capture, migration and cleanse activities.

3.42. The ongoing costs for RP2a represent an overall cost saving compared to the counterfactual. This is driven by both the removal of requirements around the consumer enquiry service (which would become a DCC requirement) and the reduced requirements around UK Link.

Distribution Network Operators (DNOs) and ECOES

3.43. We have updated our assessment of the net impacts for DNOs and ECOES of our reform packages.⁵⁰

3.44. The main change that we have made to the analysis presented in the consultation stage IA has been to correct several errors in the supporting spreadsheets.

Summary of DNO and ECOES direct costs

3.45. Table 3.5 below presents net costs for DNOs and ECOES. We have presented these costs together to ensure the confidentiality of the data provided by MEC in relation to ECOES.

Table 3.5: NPV net costs for DNOs and ECOES (2018-35, £millions)

	RP1	RP2a
Transitional costs	3.7	5.8
Annual on-going net costs (undiscounted)	0.2	(0.6)
Total (18 year NPV)	5.8	(0.2)

3.46. As with GTs and Xoserve, DNO transitional costs for RP1 are lower than for RP2a as respondents considered that the scale of the required changes would be lower cost to implement.

3.47. A significant proportion of DNO transitional costs for all reform packages are linked to data capture, migration and cleanse activities.

3.48. The ongoing DNO costs for all reform packages represent a small overall cost increase RP2a compared to the counterfactual (when the impact of the CES is excluded for RP2a). This is despite the reduced role of MPRS under RP2a. Once the impact of removing DNO requirement to provide consumer enquiry services is included for RP2a, DNOs report an overall cost saving for RP2a.

3.49. For RP1, the focus of costs for ECOES relates to the one off migration of data (meter serial number, installation date, MAP ID etc) to MPRS and supporting any cleanse of meter technical data.

⁵⁰ Our approach to assessing DNO and ECOES costs is described in more detail in paragraphs 3.116 to 3.126 of the consultation stage IA.

3.50. Costs for RP2a are expected to be higher for ECOES as it would need to interface with CSS in addition the one off data migration and cleanse requirements noted in the paragraph above.

3.51. We note and welcome the current industry-led work on a joint gas and electricity enquiry service.⁵¹ This proposal is at an early stage and we have not accounted for it in this assessment. We will make any necessary adjustments to this IA, for example to the ECOES costs, when we update our impact assessment for publication alongside our FBC.

MAPs

3.52. We have updated our assessment of the net impacts for MAPs of our reform packages.⁵²

3.53. Following additional stakeholder engagement, we have made the following changes to our assumptions:

- For both RP1 and RP2a, we have scaled up benefits from improved asset tracking and associated reduction in invoice query management costs for CMAP members in the gas market. This follows information provided by CMAP. We have therefore increased these benefits by a factor of 3.33 to account for three of the 10 members responding to our request for information.
- We have excluded costs for providing information to support the population of the gas MAP ID. Based on the information provided, we expect this to be low-cost and MAPs would be expected to be able to provide information on the sites that they invoice.
- We have removed costs for those MAPs that said they would incur a net cost in receiving notifications from CSS when a switch takes place. This is a discretionary feature so we would not expect MAPs to use it if it did not add value for them. Net costs were typically reported by MAPs that operated predominantly in the electricity market.⁵³

Summary of direct MAP impacts

3.54. Table 3.6 below presents net costs for MAPs.

Table 3.6: NPV net cost for MAPs (2018-2035, £millions)

	RP1	RP2a
Transitional costs	-	-
Annual on-going net costs (undiscounted)	(0.4)	(0.4)
Total (18 year NPV)	(4.4)	(4.2)

⁵¹ MIS development is being taken forward by Gemserv in its role as the central code body for the MRA and by Xoserve in its role as Central Data Service Provider under the UNC. The Ofgem Switching Programme will continue to work closely with industry on this initiative through our membership of the MIS Programme Board as well as the Joint MIS Development Group (JMDG).

⁵² Our previous approach to assessing MAP costs is described in more detail in paragraphs 3.127 to 3.131 of the consultation stage IA.

⁵³ MAPs indicated that changes to add the MAP ID to UK Link and receive notifications from CSS would have value in the gas market as this information is not held centrally and MAPs find it difficult to track the supplier at a premises for invoicing. In the electricity market, MAPs can already access relevant supplier ID information from ECOES.

3.55. We received data from six MAPs as well as written responses from other MAPs. We recognise that this is only a small proportion of active market participants. We understand that there are currently around 50 MAPs although many are very small. For some, in particular those that operate in the electricity market only, we think that costs would be negligible. For gas MAPs, we consider that on balance, there are likely to be benefits. The information presented in Table 3.6 above is based on the benefits indicated by three CMAP members and has been extrapolated up to account for all 10 members. We think that this represents a fraction of the benefits to gas MAPs. We therefore think that the benefits are likely to be higher than those that we have quantified.

3.56. Some MAPs have indicated that, in addition to benefits from invoice management, there will be a reduction in costs associated with lost assets (ie meters that MAPs are aware that they do not have the current supplier details to invoice, but do not have an effective way to identify that supplier to invoice them). Depending on the commercial arrangements operated by each MAP, the associated lost revenue will either be passed through to suppliers or borne by MAPs. We have not sought to quantify these benefits. Suppliers are also likely to see direct benefits in terms of reduced MAP invoice queries. Our expectation is that these benefits are not fully captured in the quantified supplier impacts shown earlier in this chapter.

MOPs and MAMs

3.57. We have updated our assessment of the net impacts for MOPs and MAMs of our reform packages.⁵⁴

3.58. Following additional stakeholder engagement, we have made significant changes to our assumptions on MOP and MAP costs. We have tested these assumptions with MOPs and MAMs.⁵⁵

3.59. We have made the following changes to our assumptions that apply to MAMs only:

- Populate MAP ID in UK Link.
 - For all reform packages we propose that the gas MAP ID is held centrally within UK Link.
 - We anticipate a one-off exercise to populate UK Link with this data. This is likely to include MAMs providing an extract of data that they hold on the MAP ID.
 - Xoserve would use this data source, as well as data from other parties such as shippers and MAPs.
 - In response to the January 2017 RFI, we received costs from a limited number of MAMs on this activity which varied significantly.
 - We have limited confidence in the data provided. However, to ensure that a value is included in the IA, we have applied an amount for a “typical” MAM and extrapolated it up to account for the number of MAMs in the market.

3.60. We have made the following changes to our assumptions that apply to MOPs only:

⁵⁴ Our previous approach to assessing MOP and MAM costs is described in more detail in paragraphs 3.132 to 3.137 of the consultation stage IA.

⁵⁵ We engaged with both the Gas Metering Forum and the Electricity Metering Forum that are part of the Association of Meter Operators.

- Maintenance of MTD in MPRS.
 - Currently, MOPs provide a limited set of MTD and the MAP ID to ECOES.
 - Under both RP1 and RP2a, it is proposed this information is sent to MPRS.
 - In the January 2017 RFI, we asked MOPs to provide information on the costs of sending this information to MPRS rather than ECOES.
 - Our assumption here is that this cost would be negligible as it could be achieved by re-routing the existing data flow.
 - We are therefore not proposing to include any costs for MOPs associated with this change in the IA.

3.61. We have made the following changes to our assumptions for both MOPs and MAMs:

- Receipt of notifications from CSS.
 - Under RP2a, CSS will provide notification of both a confirmed switch (once the objection process has concluded) and executed switch (when it will definitely happen).
 - We consider that it will be a commercial decision for MOPs and MAMs to decide if they want to use these notifications. We assume that MOPs and MAMs will only do this if there is benefit to doing so.
 - On the basis that this is a commercial decision, we propose not to include a cost estimate for MOPs and MAMs managing CSS notifications in the IA.
- Meter exchanges
 - There is a risk that faster switching will increase the likelihood that a MOP or a MAM would undertake a meter exchange after a switch and when they are no longer the appointed agent.
 - Under the RP2a switching proposals, the losing supplier will be provided with notification at least one full working day prior to a switch being effective which they could then use to notify the MOP or MAM, for example through a deappointment flow. For RP1, this notification could be sent by the losing supplier two working days prior to the switch.
 - Under RP2a, MOPs and MAMs would also receive notification of both a confirmed and an executed switch before the switch took place - for a next working-day switch, this would at minimum be around 5pm on the day before the switch.
 - In RFI responses, several MOPs and MAMs said that they undertook a daily sweep of their meter exchange appointments to ensure that they were only attending when they are the appointed agent. We note that this would appear to be good practice in a next working-day switching environment.
 - Under RP2a, MOPs and MAMs would be able to use the notifications from CSS if they wished to, access to ECOES and DES or any other notifications received from the losing supplier to allow them to conduct a regular sweep of meter exchange appointments and to cancel those for which they are no longer the appointed agent.
 - We note that there may be some impacts for MOPs and MAMs that do not currently undertake this type of regular sweep. We do not have good quality quantitative information upon which to provide a detailed estimate of the likely costs.

- While we do not consider that these costs are likely to be material in the overall context of the IA we recognise that this may have a cost impact for some organisations.
- Agent appointment
 - During our discussions with MAMs, it was noted that access to specific meter technical details and other technical information around the meter point was needed to allow a MAM to accept an appointment.
 - Some MAMs said that the timeliness of access to this data would need to be sped up in the context of a next day switch. If this did not happen, there was a concern that consumers that experienced meter problems, or wanted a meter exchange soon after the switch date, may not be attended to if there was not an appointed MAM in place.
 - We recognise that there is a need to review the timescales under SPAA (and BSC for MOPs) for MTD provision on the context of a next day switch. One area that we could consider is whether MAMs (and MOPs) accessing data from industry enquiry services such as DES and ECOES, would mitigate concerns.
 - Given that further discussions are required, we have not included an estimate of costs linked to this issue in the IA, but recognise that this is a potential source of costs for some organisations.

Summary of direct MOP and MAM costs

3.62. As noted above, we have quantified the costs for MAMs in providing information to Xoserve to support the initial population of MAP ID in UK Link. This is shown in Table 3.7 below. We have not included ongoing costs for maintenance of this data. We understand that MAMs currently provide this data to suppliers and our expectation is that either MAMs or the shipper will pass this on to Xoserve.

Table 3.7: NPV net cost for MOPs and MAMs (2018-2035, £millions)

	RP1	RP2a
Transitional costs	0.1	0.1
Annual on-going net costs (undiscounted)	-	-
Total (18 year NPV)	0.1	0.1

3.63. We recognise that there are other costs for MAMs and MOPs that we have not quantified. These relate to any changes needed to manage meter exchanges within a fast switching timescale and agent appointments. Rather than provide a spurious value within this IA, we will continue to work with MOPs and MAMs to develop our understanding and identify what, if any, changes are required to industry arrangements.⁵⁶

⁵⁶ In particular, we expect to request that Code Panels review whether any consequential amendments are required to the drafting of their respective codes to ensure that they are consistent with the aim of the Switching Programme. This will include the rules for MAMs and MOPs set out in SPAA, MRA and BSC. We will also work with Code Panels to identify what changes to code drafting should be progressed as part of the Significant Code Review.

Price comparison websites (PCW) direct costs

3.64. We have tested our assumptions further with PCWs and updated our assumptions on the costs that these organisations would face. This has involved discussions with PCWs that are members of Ofgem’s Confidence Code⁵⁷ and we have provided several iterations of draft assumptions for their review. The key cost areas that we have examined are:

- Transitional costs for developing new/amending existing interfaces with suppliers for sending customer contract data.
- Ongoing annual costs to maintain these new/amended interfaces.

3.65. To facilitate the switching speeds anticipated for RP1 and RP2a we think that PCWs will need to review when they send contract information through to suppliers. For example, if a PCW currently sends data through to the supplier at midnight, for any contract entered into during the day, this might be changed to earlier in the day to allow suppliers to process these contracts and send through switch requests, so that the consumer can switch at the end of the next working day (the supplier would need to send the switch request by 6pm for RP1 and by midnight for RP2a). PCWs may also increase the frequency of contract data provision to suppliers.

3.66. Through discussions with PCWs, we have identified that there are some (modest) IT transitional costs to change the frequency with which contract data is sent to suppliers for RP1 and RP2a.

3.67. We have not assumed ongoing costs for PCWs in maintaining these changes on contract update frequency for RP1 and RP2a as we think that these would be similar to current costs.

3.68. We considered whether PCWs might incur costs in capturing additional data items, for example the consumer’s agreement to pay for energy consumed during the cooling off period. We think that there would be some transitional costs to change the PCW data capture systems. We have not assumed any additional ongoing costs around data capture.

3.69. Table 3.8 below summarises the additional costs that we have estimated for PCWs for RP1 and RP2a under a central case.⁵⁸

Table 3.8: NPV net cost for PCWs (2018-2035, £millions)

	RP1	RP2a
Transitional costs	0.4	0.3
Annual on-going net costs (undiscounted)	-	-
Total (18 year NPV)	0.4	0.3

3.70. In estimating these costs, we have assumed that there are 16 PCWs in the market that provide a service to directly facilitate the switch with a supplier. Each of these PCWs would

⁵⁷ The Confidence Code sets out minimum requirements that a provider of an interactive price comparison service for domestic consumers must meet in order to be, and remain, accredited by Ofgem.

⁵⁸ The differences in costs shown between RP1 and RP2a are a result of our approach to discounting and the different years in which these costs are expected to fall. The undiscounted values are the same.

have interfaces in place with 20 suppliers. Our updated assumptions are set out in Appendix 2.

3.71. We have assumed in our counterfactual that PCWs will already have in place API links to an enquiry service as a result of the implementation of the CMA remedy.⁵⁹ This service is expected to go live in early 2018.

3.72. We note that, under both RP1 and RP2a, PCWs will have access to additional data items that are not currently held centrally. For example, a domestic/non-domestic customer indicator and information on electricity related MPANs. We have assumed that any additional costs for PCWs in using new data items held on the enquiry services to validate consumer contract data will be more than offset by a reduction in the switch failure rate, and an increase in any associated commission that they receive.

Other costs

3.73. In four instances, we have followed a different approach to estimating costs areas that would be incurred by parties under the reform packages. These relate to communication costs, programme costs, post implementation costs and (for RP1 only) central assurance and coordination costs. We describe below how we have estimated these costs.

Communication costs

3.74. As described in the OBC, we have updated our assumptions for communication arrangements for RP2a. In the September consultation and IA, we assumed that information was exchanged using the DTN only. Our current intention is that the CSS will now interface with parties through both the DTN and the IX Network. Updated costs are shown in Table 3.9 below.

3.75. We have made the following assumptions in this IA:

- Retain one off cost of £500k to upgrade the existing DTN systems to manage real-time communication to the service levels envisaged (£475k in the table below as a result of discounting).
- Retain annual costs of £600 for 16 remote volume user gateways. This is for the gas suppliers that currently do not have a DTN connection.
- Remove annual costs of £600 each for 5 remote volume user gateways for GTs that are not currently connected to the DTN. This is because we have assumed that they will exchange data with the CSS using the IX Network.
- Annual costs of £11,000 for DCC to cover a high volume internet gateway DTN connection.⁶⁰ Note that these costs are captured in Table 3.3 rather than below.
- Additional DCC costs for CSS design, build and testing to account for its use of the IX Network.

⁵⁹ [CMA Energy Markets Investigation \(ECOES/DES\) Order 2016.](#)

⁶⁰ Previously this also included Xoserve. Now removed as Xoserve has been assumed to exchange data over the IX Network. We have also amended a minor error in recording of charges for the DTN Remove Virtual High Volume Gateway.

- For existing DTN users, we have assumed no change to charges as the underlying infrastructure is fixed cost and therefore additional volumes would be absorbed. We have also assumed, for the purpose of this IA, that there will be no upgrade costs for the IX Network given the expected volumes and requirements for data exchange between GTs and the CSS. However, we recognise there is uncertainty here as we have not yet fully tested what changes might need to be made to ensure the IX Network meets the programme requirements.

Table 3.9: NPV net cost of additional communication requirements (2018-2035, £millions)

Transitional	0.62
Annual on-going net costs (undiscounted)	0.02
Total (18 year NPV)	0.86

3.76. For RP1 we have assumed that existing communication arrangements and costs will continue and we have not included additional costs in this IA.

Programme costs

3.77. We have reviewed and updated our programme cost assumptions in light of our greater understanding of the phases of work required to implement the reform packages.

3.78. The key assumptions that we have used are summarised below and have been updated from our September assessment (see Appendix 2 for more detail on our updated assumptions).

3.79. Our definition of programme costs includes the additional costs incurred by suppliers, network companies, metering agents; code administrators etc. to participate and support Ofgem in the design and delivery of the new switching arrangements under the governance structure reported in Chapter 7 of the OBC. It excludes DCC costs which, for RP2a, are already included in its cost estimates. Specifically the estimated costs include:

- Participation in workstreams (we have assumed five workstreams: design, delivery, regulatory design, security and commercial).
- Participation in the Switching Programme Delivery Group, Switching Programme Steering Group, Technical Design Authority.
- Reviewing and responding to policy and statutory consultations published by Ofgem (we assumed 5 in 2018 and 3 in 2019).
- Financial resources provided by industry code bodies to workstreams.
- Cost of modifying industry codes, including funding from SPAAEC and MEC to draft code modifications.

3.80. Based on our implementation assumptions, we have modelled programme costs for RP1 over the period 2018 to 2019. For RP2a, they have been modelled over the period 2018 to 2021. For RP2a, we assumed that that the bulk of programme costs would be incurred in 2018-2020 and there will be some additional costs in 2021 for resolving any issue arising

during the implementation phase. These costs will be in addition to post-implementation costs that we have assumed will be incurred in 2021 as well.

3.81. Further, to simplify our approach we have generally disregarded differences in size between the different organisations involved and assumed there are differences only with respect to time spent reviewing and responding to consultations. This reflects our understanding of the likely resource constraints between organisations.

3.82. We recognise that there is a degree of uncertainty in these costs as they are based on assumptions. We have therefore developed a high and low case around the central case for inclusion in the cost ranges shown at the end of this chapter.

3.83. Our understanding of the phases of work required to implement the reform packages has increased and as a result we have made changes to the following assumptions under the central case:

- Time spent attending and preparing for meetings – reduced from 2 days to 1.5 day for workstreams, SPDG and SPSG meetings. This change is due our increasing use of teleconferences and webinars to involve industry in our work and it will thus reduce time spent travelling to and from meetings.
- Additional meetings for the delivery workstream in 2018 which had not been included in the consultation stage IA.
- Additional meetings for all other workstreams in the period 2018-2020.
- Changes to the number of SPDG and SPSG meetings for the period 2020-2021.
- Additional Delivery and Regulatory Design workgroup meetings during the DBT phase in line with our new governance arrangements for DBT as described in the OBC (see Chapter 7).
- Changes to the way we calculate the cost of amending industry codes. In the consultation IA we added a lump sum for the costs of amending industry codes. We have now revised our approach and calculated the cost of modifying industry costs using a simple model based on staff costs. We have assumed that all substantive legal drafting of the REC will be led by Ofgem, with external support funded by the SPAA and MRA parties. It is anticipated that the subsequent modifications to the remaining industry codes will also be led by Ofgem through the significant code review process. The modification to other industry codes are therefore likely to focus of removal of obsolete text and appropriate revision to definitions and cross references rather than incorporating substantive additional text. We therefore do not anticipate there being anything that could not be accommodated within the usual modification procedures, including scheduled panel meetings and usual code administration budgets (see Chapter 8 for further details on this process). In practice this means that there is a significant reduction in our estimates for this cost.

3.84. As a result of the changes discussed above, there has been a reduction in our estimates for programme costs. The updated costs are shown in Table 3.10 below.

Table 3.10: NPV net programme costs (2018-2035, £millions)

	RP1	RP2a
Total (18 year NPV)	5.6	7.3

Post implementation costs

3.85. We have modelled industry party costs for the additional support needed following go-live. This is based on the costs and duration of resource needed to resolve unforeseen problems occurring immediately following go-live. Our expectation is that industry parties may choose to retain some of the resource employed to build and test the new arrangements over this initial phase. For the avoidance of doubt, this is resource over and above business as usual.⁶¹

3.86. To simplify our modelling, we have assumed that these costs will fall in 2021 for RP2a. For RP1 they are expected to be incurred in 2020. We have not sought to link costs to particular stakeholder groups eg suppliers, networks etc in the results shown for these industry groups. Instead, we have treated these as a separate cost item. To account for uncertainty, we have varied the assumptions around our central case to provide a high and low case which are described at the end of this chapter.

3.87. The estimated post implementation costs are shown in Table 3.11 below. The assumptions that we have used to derive these costs remain the same as those described in the consultation stage IA (see Appendix 2 for further details).

3.88. We recognise that, were there to be a significant problem at implementation, the consequences would be far reaching for consumers and the industry and could potentially involve high costs. We are aware of these potential impacts and will put in place delivery and assurance arrangements commensurate with this risk. In developing the high and low case costs we have not sought to model the impact of a significant failure at implementation but have instead varied the assumptions around the number of FTEs and length of time that a team will be in place around the expected delivery quality, ie that there will be some issues to resolve but that these do not have a serious impact on implementation costs and consumers.

3.89. While have not revised the assumptions used for calculating post-implementation costs, we found an error in one of our model, which means that the post-implementation figures we published in the consultation IA were incorrect. Correct figures are provided in Table 3.11.

⁶¹ Industry data provided in response to our January 2017 RFI was highly variable both in costs between similar type of party and on expected duration of the post-implementation period. We have therefore undertaken an exercise to model the expected cost. In doing this we have made the assumptions on the number of large, medium, small and very small organisations in the market that will have post implementation costs. We have also made assumptions around and the duration of these costs. We have sought to validate these assumptions with experts in this field.

Table 3.11: NPV net post-implementation costs (2018-2035, £millions)

	RP1	RP2a
Total (18 year NPV)	5.0	7.3

Central coordination and assurance

3.90. We have reconsidered the costs of RP1 and identified a shortfall in our assessment linked to central coordination and assurance. We consider that the requirements are likely to be lower than for RP2a. We think that RP1 will require a central PMO function and a central assurance function. Unlike RP2a, we do not think that there would be a requirement for a systems integrator.

3.91. To develop our cost estimates, we have considered the information provided by DCC for RP2a (which are included in the DCC costs noted above in Table 3.3). We have adjusted these costs to account for there not being a systems integration function and for the shorter design, build and test period.

3.92. To protect the confidential nature of the cost data provided by DCC and so as to not unduly influence the procurement of the central coordination and assurance services for RP2a we have included the RP1 central coordination and assurance costs with supplier costs reported in this chapter.

Public sector

3.93. For each of the reform packages, Ofgem would incur some transitional costs of continuing to manage the programme through to its conclusion, as well as some very small ongoing staff costs of managing the DCC price control arrangements. These are shown in Table 3.12 below. The ongoing costs would be incurred for RP2a only.

Table 3.12: NPV of Ofgem programme costs (2018-2035, £millions)

	RP1	RP2a
Transitional	3.40	5.76
Annual on-going net costs (undiscounted)		0.02
Total (18 year NPV)	3.40	5.99

Summary of direct costs and ranges

Summary of direct costs (central case)

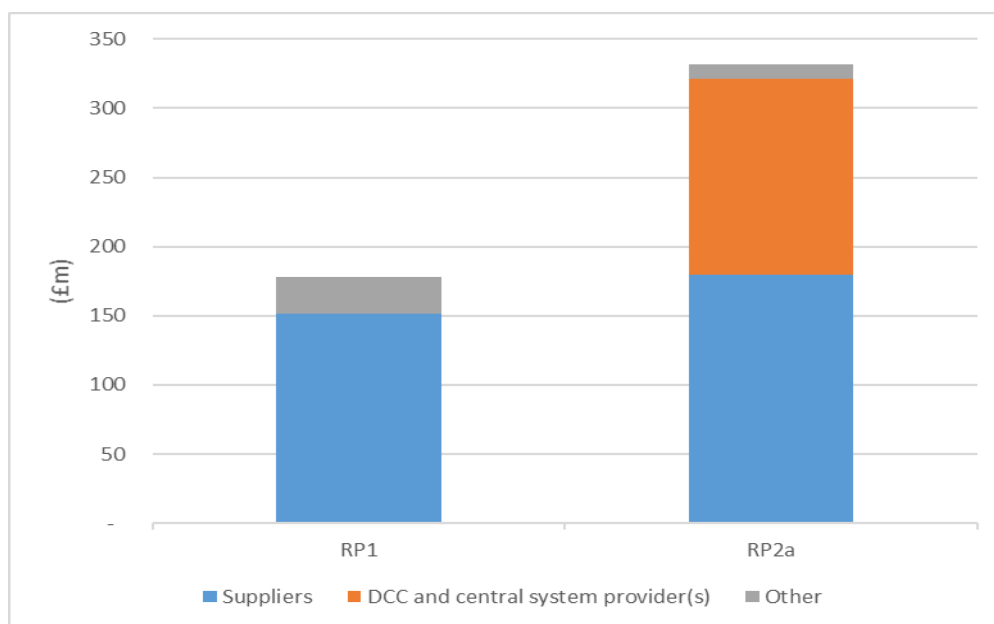
3.94. Table 3.1 presented at the start of this chapter summarises the central case direct net costs estimated for industry and the public sector for each reform package.

3.95. This information is shown in graphical form in Figure 3.1 below. This shows that the bulk of the costs would be incurred by suppliers under RP1 and by suppliers and DCC under

RP2a.

3.96. We do not expect these costs will be passed through fully to consumers by way of higher bills. Our analysis on the net consumer impacts in Chapter 7 includes an adjustment to these direct costs to account for our expectations on cost pass-through.⁶²

Figure 3.1: NPV of total net industry and public sector incremental direct costs by party (2018-35, £millions)



3.97. Table 3.13 below summarises the detailed information provided earlier in this chapter on the costs expected to be incurred by each type of market participant that we have assessed. Note that the category of “Other” includes Ofgem costs, programme costs and post-implementation costs. For comparison, this table also shows our earlier estimates presented in the consultation stage IA in September 2017.

Table 3.13: NPV net incremental costs by party shown for both the consultation stage IA published in September 2017 as well as in this updated decision IA (2018-35, £millions)

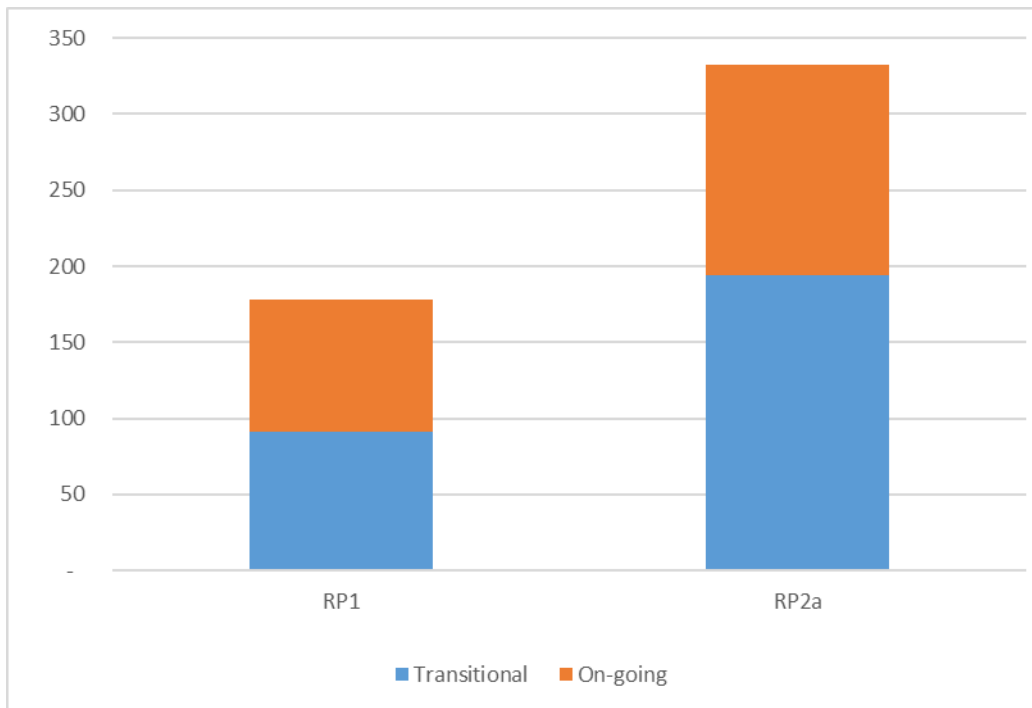
	RP1 (updated)	RP1 (Sept 17)	RP2a (updated)	RP2a (Sept 17)
Suppliers	151.5	148.8	179.8	182.9
DNOs and MEC	5.8	6.8	(0.2)	8.9
GTs	8.1	8.5	(5.6)	(3.4)
DCC and central system provider(s)	-	-	141.3	147.1
MAPs	(4.4)	(1.1)	(4.2)	(0.8)
MAMs and MOPs	0.1	10.8	0.1	11.9
PCWs	0.4	-	0.3	-
Other	14.0	17.4	20.6	22.0
Total (18 year NPV)	175.6	191.2	332.2	368.6

3.98. In Figure 3.2 below we can see that the investment needed to put in place RP2a is higher than RP1. This is estimated to be an additional £105m over the assessment period. The

⁶² Paragraphs 7.1 – 7.3 of our [consultation stage IA](#) explain our approach to cost pass through, which we have retained in this IA.

ongoing costs for RP2a are also higher than for RP1. This is estimated to be an additional £51m over the assessment period.

Figure 3.2: NPV of total net industry and public sector incremental direct costs by cost type (2018-35, £millions)



Direct cost ranges

3.99. We recognise that there are significant costs to industry for each of the reform packages. We have made extensive efforts to ensure that costs are understood and included where possible. Where the costs have been difficult to obtain or verify we have adopted a consciously cautious approach to ensure that we were as far as possible mitigating the risk of underestimating the costs.

3.100. To account for uncertainty, we have developed high and low costs ranges around our central case. We have reviewed the ranges that we applied in the consultation stage IA and have made two changes. This has improved the consistency of our approach:

- added a range (+/-20% of central case NPV) for ongoing costs for suppliers that did not respond to the January RFI.
- increased the range for transitional costs for suppliers that did not respond to the January RFI from +/-10% to +/-20%.

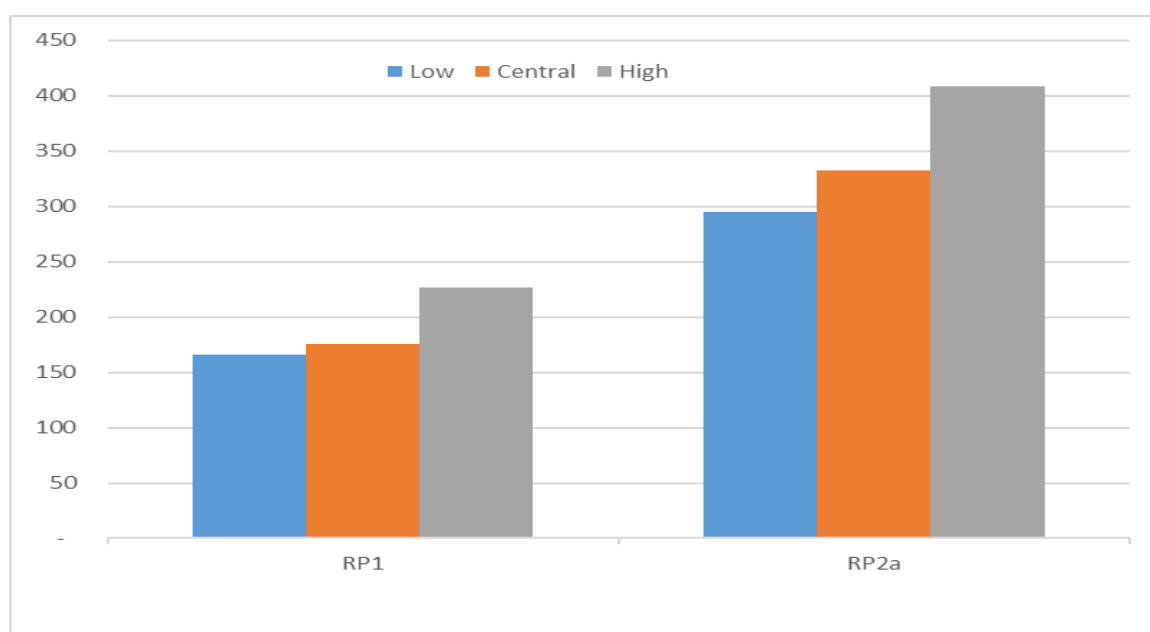
3.101. In summary, we have included cost ranges for the following areas of cost uncertainty:

- Programme costs
- Post implementation costs
- Transitional costs for suppliers that did not response to the January RFI
- Ongoing costs for suppliers that did not respond to the January RFI
- Transitional and ongoing costs for PCWs

- DCC transitional costs to DBT phase
- DCC internal and external transitional costs during DBT (excluding central coordination and assurance costs)
- DCC and CSS provider ongoing costs.

3.102. Figure 3.3 below summarised the range of costs that we have developed around the central case. We have used this range to develop the potential net impacts for consumers shown in Chapter 7.

Figure 3.3: NPV net incremental low, central and high case costs for RP1 and RP2a (2018-35, £millions)



3.103. In Table 3.14 below we present updated range figures for RP1 and RP2a as well as the figures we published in the consultation IA.

Table 3.14: NPV of total net industry and public sector incremental direct costs by cost case (2018-35, £millions)

	RP1 (updated)	RP1 (Sep 2017)	RP2a (updated)	RP2a (Sep 2017)
Low	165.9	186.5	294.5	334.2
Central	175.6	191.2	332.2	368.7
High	226.4	265.6	408.9	469.3

4. Monetised direct benefits

Chapter summary

This chapter presents our updated estimates for the direct benefits of the two reform packages under consideration following our consultation. It explains where the analysis has changed, and what impact this has had.

4.1. In this section of the impact assessment we set out our updated estimates of the direct benefits of the reforms. This includes the direct benefits to consumers as well as the efficiency savings for suppliers from more reliable switching. In addition to presenting the updated figures, we explain how the underlying methodology or assumptions have changed. Our full list of assumptions is in Appendix 2.

4.2. In this chapter we sought to monetise:

- Benefits to consumers and suppliers of improved reliability;
- Consumer time savings from faster switching; and
- Bill savings to highly engaged consumers through faster access to improved terms.

Benefits to consumers and suppliers of improved reliability

4.3. A core objective of the Switching Programme is to improve consumers' experiences and perceptions of switching by making the switching process more reliable. This is to reduce the harm that negative switching outcomes can cause directly to consumers, but also to avoid having consumers being put off from engaging with the market in future.

4.4. Where industry premises address data has been recorded in an inaccurate, inconsistent or confusing way, it can lead to a number of unsatisfactory outcomes or experiences for consumers, including some consumers that have not even attempted to switch suppliers. The three main outcomes we have sought to explore within this quantified analysis are instances where; (i) a consumer is switched in error; (ii) the switch is unsuccessful; or (iii) the switch is delayed.

- (i) **Erroneous switches:** in a small proportion of cases when a consumer requests a switch, the wrong meter point is identified, and as a result a different consumer, who had not requested a switch, is transferred to a new supplier. The primary reason for an erroneous switch is the incorrect meter point being identified by the gaining supplier when registering the switch. The most prevalent cause of this is thought to be industry address data that is either incorrect or ambiguous.
- (ii) **Unsuccessful switches:** there are a number of points throughout the switching process where the switch may be abandoned by the consumer or their gaining supplier, or rejected by the central switching service. Many of these decisions to give up on a switch are caused by discrepancies between the consumer's

understanding of their address, the energy industry’s record of their address, and the difficulty of matching these to the consumer’s correct meter point.

- (iii) **Delayed switches:** these are switches that are not completed within the existing 21-day required standard. There are a number of potential reasons for a switch being delayed, but we know that many are caused by the need to verify data or gather further information regarding a consumer’s address, meter point or meter type.

4.5. The consultation stage IA set out our analysis of how our data improvement proposals would reduce the volumes of these harmful outcomes, and what the benefit of these improvements would be to consumers and suppliers. Following from our own review of this analysis, as well as the feedback received through our consultation, we have made a small number of changes to this analysis:

- We have revised the way that the harm to a consumer from a delayed switch was valued. In our consultation IA, we estimated that a delayed switch would cost a consumer one hour of time. We have since identified that this was inconsistent with the approach adopted for valuing the harm from an erroneous switch, but also appeared to undervalue the harm when compared to the compensation that is awarded through Ofgem’s guaranteed standards of service. Through that scheme, consumers are awarded £30 when certain levels of service standards are not achieved. We have therefore adopted an assumption of £30 to represent the value of inconvenience caused by a delayed switch. This has increased the value of the benefit to consumers from a reduction in delayed switches.
- We identified that we had likely overstated the impact of our data improvement measures on the future incidence of rejected switches, in particular regarding electricity switches. The assumption for the proportion of rejections that are caused by issues with address data quality has been revised downwards to 10% for gas, and 0% for electricity. Previously the assumption was 15% for both fuels. This is based on further analysis of data from the reason codes recorded for rejections, and has led to a reduction in the estimated benefit.

4.6. The following tables present our estimates of the impact our reforms will have on the instances of erroneous, unsuccessful, and delayed switches.

Erroneous Switches

	RP1	RP2a
Impact on volume of erroneous switches in year 1 (domestic)	-8,300	-25,600
Impact on volume of erroneous switches in year 1 (non-domestic)	-1,700	-2,700
Impact on volume of erroneous switches in year 2 onwards (domestic)	+20,600	-12,800

Impact on volume of erroneous switches in year 2 onwards (non-domestic)	+200	-1,900
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Unsuccessful switches

	RP1	RP2a
Impact on the annual volume of abandoned domestic switches in year 1	-79,300	-103,700
Impact on the annual volume of abandoned non-domestic switches in year 1	-3,800	-5,000
Impact on the annual volume of abandoned domestic switches in year 2 onwards	-73,200	-109,800
Impact on the annual volume of abandoned non-domestic switches in year 2 onwards	-3,500	-5,300
Impact on the annual volume of rejected domestic gas switches in year 1	-16,000	-21,000
Impact on the annual volume of rejected non-domestic gas switches in year 1	-600	-800
Impact on the annual volume of rejected domestic gas switches in year 2 onwards	-14,800	-22,200
Impact on the annual volume of rejected non-domestic gas switches in year 2 onwards	-600	-900

Delayed switches

	RP1	RP2a
Reduction in the annual volume of delays to domestic switches in year 1	-59,000	-77,100
Reduction in the annual volume of delays to domestic switches in year 2 onwards	-54,400	-81,600
Reduction in the annual volume of delays to non-domestic switches in year 1	-3,800	-5,000
Reduction in the annual volume of delays to non-domestic switches in year 2 onwards	-3,500	-5,200

4.7. The updated monetised benefits of the reform packages are summarised in the tables below.

Table 4.1: Monetised reliability benefits, by switching outcomes

	Erroneous switches NPV	Unsuccessful switches NPV	Delayed switches NPV	Total reliability impacts NPV
RP1	-£44m	£99m	£61m	£115m
RP2a	£35m	£142m	£84m	£261m

Table 4.2: Monetised reliability benefits, by stakeholder

	Domestic consumers	Non-domestic consumers	All consumers	Suppliers
RP1	£70m	£11m	£81m	£34m
RP2a	£138m	£16m	£154m	£107m

4.8. Our central analysis suggests that RP1 would result in a material increase in erroneous switches at its intended switch speed (ie outside of the transitional phase). This is because the improvements made through the initial data matching exercise would be more than offset by the increases caused by faster switching. This finding suggests that RP1 is unable to simultaneously achieve our objectives for fast, and more reliable switching. Our recent qualitative survey of consumers on the impacts of negative switching experiences found that some consumers that had experienced erroneous switches were less likely to consider switching again. Some also told their family and friends about the experience.⁶³ This suggests the benefits of increased engagement would be at risk under an RP1 solution.

4.9. The results are much more positive for RP2a, with an ongoing reduction in erroneous switches expected in our central analysis. By introducing the proposed central address database as part of the new CSS, along with suitable ongoing data mastery and stewardship arrangements, we could see the number of switches going through smoothly, successfully, and on time, increase by several hundred thousand each year. This would be hundreds of thousands of consumers each year that would be left with a more positive experience of the process, and no doubt be more likely to engage again in future.

4.10. However, given the high level of uncertainty in the assumptions adopted, and the relatively small estimated reduction in erroneous switches, we consider that there may be a material residual risk of an increase in the volume of erroneous switches under RP2a if the expected improvements to data quality do not materialise. Given this uncertainty, we have concluded that an initial transitional period with expectations for switching speeds of around one week would be prudent. During this period Ofgem would monitor and test whether its expectations for the effectiveness of data improvement measures were accurate. We would only move to an expectation of next-day switching once we are confident that the desired improvement in reliability has been achieved. Should the monitoring show that significant

⁶³ [Ofgem research on unreliable switching](#)

reliability issues remain, for example that there are a large volume of erroneous switches being withdrawn during the temporary one week switching window, we would seek to identify further improvements to data quality or industry best practice before moving to an expectation of next-day switching.

Consumer time savings from faster switching

4.11. During the existing switching period of around three weeks, consumers may unnecessarily spend time engaging emotionally or actively with the switch. This could manifest itself in a number of ways:

- Consumers are likely to spend small amounts of time sporadically thinking about their switch, wondering what is happening, or being frustrated by the lack of progress.
- Seeking out updates or information on when their switch will go through, or what is holding it up. They may do this through electronic channels such as checking mobile apps or online accounts, or through live chats or email. These activities would only be expected to take a small number of minutes. Where consumers call up their supplier to request an update, this would take more time, depending on the supplier in question.⁶⁴
- Currently, when suppliers are ready to execute a switch, the gaining supplier will contact the consumer to request a meter read to be used as the opening and closing read. This will require the consumer to re-engage with their switch, possibly reading their meter for a second time, but certainly either logging back into an online account or having an additional phone call. As was highlighted by some responses to our consultation, this only relates to consumers with traditional meters.

4.12. Where switches are successful, consumers should only have to engage with the issue once at the time of the initial switch request. Faster switching should therefore save consumers small amounts of time. We set out in our consultation IA that we assumed a cautious range of 5 – 15 minutes saving for each consumer that would have switched in the counterfactual (10 minutes in our central case) using the existing slow switching arrangements. We did not receive any challenge or evidence to suggest this assumption was unreasonable, so we have retained it for the updated analysis. The only change to the analysis for this benefit is to the assumption for the number of unique domestic switching journeys in each year from a consumer's perspective (ie to take account for the fact that a dual fuel switch request will be recorded as two switches). This assumption for unique switching journeys has been increased from 4.6m to 5m after an error was spotted in the original calculation. This amendment has increased the annual estimated benefit by £0.43m. We have not made any changes to the analysis for time savings for micro-business consumers.

4.13. For RP2a the PV benefit for domestic consumers from the time saving is now estimated at £51.6m over the appraisal period. For non-domestic consumers (micro-businesses only) the equivalent figure is £8.8m. For RP1 the equivalent figures are £53.4m and £9.1m respectively.⁶⁵

⁶⁴ [Research by Which?](#) suggests average call waiting times vary from under one minute to as much as 14 minutes.

⁶⁵ The PV benefit is slightly higher under RP1 as the 15-year period where the benefit occurs is modelled to begin one year earlier. This means that the benefit is discounted slightly less heavily than it is for RP2a.

Bill saving to highly engaged consumers through faster access to improved terms

4.14. Faster switching will enable consumers to switch to improved terms two-to-three weeks earlier than they otherwise would have been able to. However, at the end of fixed term deals many consumers automatically roll back onto more expensive default tariffs. For these consumers, faster switching will also ensure that they will also return to the less favourable SVT a few weeks earlier than they otherwise would have. In most cases, consumers will end up paying the same amount for the energy over a period of a number of years, but the profile of their bills may be very slightly adjusted.

4.15. Consumers that are very highly engaged in the market could be the exception to this rule. If consumers take action to avoid reverting back onto the SVT for prolonged periods each and every time their fixed term contract ends, they can effectively 'bank' the savings brought forward by faster switching in perpetuity. Though the most engaged consumers in the market may agree new fixed deals on a regular basis, they may occasionally lapse onto the SVT for very brief periods (ie if they only remember to switch at the very end of their deal). A consequence of faster switching would be that these lapses would automatically be reduced or avoided as the lag between the decision to switch and the switch date would be removed. This benefit is assumed to apply only to domestic consumers. The more complex nature of non-domestic contractual arrangements, coupled with the much lower absolute number of non-domestic consumers likely to exhibit this type of behaviour, mean the benefit would be negligible once monetised, if applicable at all.

4.16. For details of the circumstances and consumer characteristics required for this benefit to apply, see paragraph 4.25 of our consultation stage IA. Following our consultation, we have made the following three amendments to this analysis:

- Consultees drew our attention to an assumption in our analysis that was not wholly consistent with the supply licence. SLC 24.9 – 24.10 stipulates that, where a consumer requests a switch within the three weeks that follow the end of a fixed term contract, the supplier will continue to charge the consumer under the same terms as the fixed term deal. In other words, the consumer would not be charged for their energy at the higher SVT rate, so long as they request their switch within three weeks after their fixed term deal ends. We have therefore adjusted downwards the assumption for the proportion of switches requested by highly engaged consumers in time to avoid the SVT rate altogether. This assumption has been adjusted down from 60% to 15%.
- We previously assumed that just 6% of consumers would be engaged enough in the market to consistently avoid prolonged periods on the most expensive default tariffs. We have revised this assumption upwards to 10%, in response to the Ofgem announcement that suppliers may now automatically roll their consumers onto new fixed term deals. Though many suppliers may continue to revert their consumers onto more expensive default tariffs, some suppliers in the market have indicated they plan to use this flexibility to reward loyalty, and we expect this to have some impact.

4.17. These nominal benefits have been assumed to be evenly spread across the 15-year operational period and then discounted to produce an NPV. The NPV benefit to highly engaged

domestic consumers is estimated to be around £15m for both RP1 and RP2a. This has reduced from around £35m in our consultation IA.

4.18. The scale of the benefit that will be accrued by these highly engaged consumers depends on the number of calendar days avoided on the SVT. As average switching speeds would be expected to be slightly faster for RP2a than RP1, we would expect this benefit to be marginally higher for RP2a. However, due to the large number of assumptions required for this analysis, we have not sought to present this differential as it would represent a spurious level of accuracy.

Summary of monetised direct benefits

As Figure 4.1 below shows, the main difference between the two reform packages in the monetised benefits is the extent to which they deliver improvements to reliability. RP1 is expected to offer significantly lower benefits to consumers and the industry, largely resulting from the retention of separate systems for gas and electricity, as well as inferior ongoing arrangements for maintenance and stewardship of data. For the other direct benefits, which relate primarily to speed, there is no material difference between the estimates for RP1 and RP2a.

Figure 4.1: Monetised central estimates of the direct benefits for each reform package (£m)

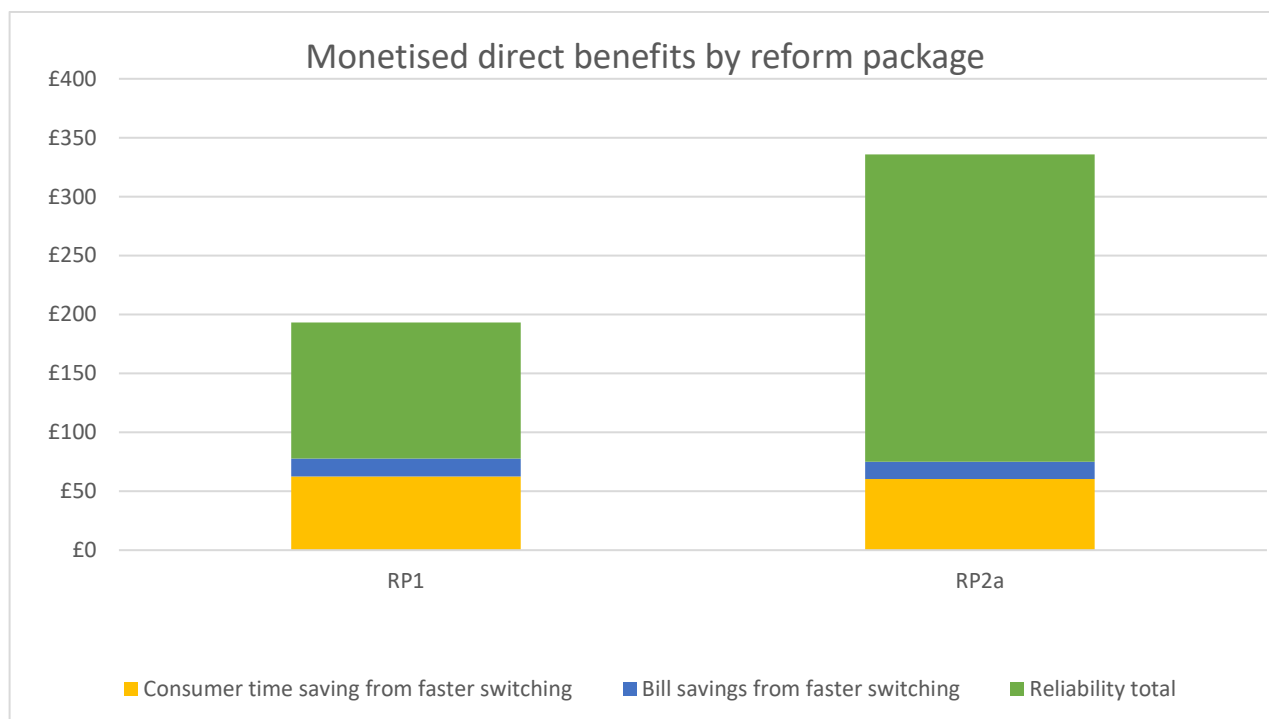


Table 4.3: Updated monetised direct benefits, by reform package

Reform Package	Direct benefits total (decision IA)	Change from consultation IA
RP1	£193m	-£12m
RP2a	£336m	-£6m

5. Indirect benefits

Chapter summary

In this chapter we describe the indirect benefits that we monetised linked to consumer savings from increased engagement. It is difficult to predict what level of increase we can expect in consumer engagement. We have therefore developed three scenarios which are presented for illustrative purposes only.

5.1. The retail energy market is sufficiently complex and dynamic that predicting long-term consumer and supplier behaviour to any reasonable level of accuracy in the counterfactual, or in response to our reforms, would not be practical. While there are events, such as price spikes that have predictable short term impacts on switching rates, trends over the longer term are much harder to explain. Though we are confident that removing friction from the switching arrangements and improving experiences through increased reliability will lead to more engagement, we do not have sufficiently robust evidence to inform a central estimate for what this consumer response will be. While we have evidence from consumer research that informs us of the proportion of consumers that would value the changes we are proposing, we can't expect stated preferences to necessarily turn into action. Also, although it is helpful to look at other sectors that have made similar improvements to the switching arrangements, there is no comparator that can be fully relied upon with confidence.

5.2. We have therefore sought to produce several illustrative scenarios for a range of outcomes that we believe are plausible, supported by evidence where possible, in order to demonstrate the scale and range of benefits that could be achieved in the domestic market. We have used this analysis to give us confidence that our reforms will lead to positive outcomes for consumers, rather than to estimate the exact value of the benefit. In particular, we will demonstrate that a very modest consumer response to the reforms could generate significant consumer benefits. We have produced some scenario analysis to illustrate this point.

Expectations for increased engagement

5.3. By reforming the switching arrangements, we will improve consumers' experience of the process, which should in turn improve consumers' general perceptions of the level of hassle and risk involved. We know from consumer research that, although the potential savings available are by far the biggest driver of consumer behaviour, there are other barriers to engagement that are important to consumers. In response to our latest Consumer Engagement Survey,⁶⁶ 46% agreed that switching is a hassle that they don't have time for, 41% agreed that they worry that if they switch something will go wrong, and 27% said it takes too long. Speeding up the process should help dispel the misconception that the process is complex and risky, or that it needs to be resource intensive. Making the process more reliable will give consumers greater faith that they can engage with the market without something going wrong.

⁶⁶ Ofgem [Consumer Engagement Survey 2017 Report](#).

5.4. By linking gas and electricity meters to the same single address, and giving the consumer greater confidence that they can switch both fuels together at the same time, we anticipate making the process much more consumer friendly.

5.5. Collectively, these changes will reduce the costs to consumers of switching, both perceived and real, and as a result make engaging with the market more appealing. We would therefore expect consumers to be more willing to shop around for the best deal and take up the savings on offer. This should lead to a higher level of switching than we would otherwise have seen, generating savings for those consumers on their energy bills. This may either be seen through increased switching by those who are already partially engaged in the market, or through completely disengaged consumers beginning to engage for the first time.

5.6. Both the threat and the experience of additional switching in the market will provide greater incentives for suppliers to try and attract new consumers, and to take steps to retain their existing consumers. They may seek to differentiate themselves by lowering their prices, improving their consumer service, and offering innovative new products and services.

5.7. As well as encouraging further increases in switching between suppliers, the stepping up of consumer retention efforts ought to result in more consumers switching tariffs with their existing supplier, generating further savings.

The counterfactual and modelling assumptions for the scenario analysis

5.8. As outlined above, it would not be practical to forecast consumer behaviour over a prolonged period, nor would it be feasible to accurately forecast the fluctuations in the energy market that would occur in our counterfactual. We have therefore made a series of simplifying assumptions about how the market would have continued to operate in the absence of our reforms, as well as for the benefits that will continue to be available to consumers that choose to switch suppliers or tariffs. The key element of these assumptions that enables us to conduct simple scenario analysis is that each of the variables are assumed to be constant over time. While we recognise that this will not be the case, and that there will be significant volatility in parameters such as switching volumes, we do not feel that we could make any alternative assumptions with any greater degree of confidence. The key assumptions made to inform this are consistent with the assumptions made about the counterfactual for the rest of the impact assessment, and are unchanged from our consultation IA.

5.9. As outlined in Chapter 1, we have not updated our analysis to take account of the impact that the planned price cap on default tariffs will have. This means that we have retained the assumptions from our consultation IA, produced before the proposed price cap was announced, for the savings achieved by consumers that switch. For simplicity, we had based these assumptions on the average price differentials seen in the market over the last few years. In the absence of any information regarding the design of such a cap, it would be inappropriate to present assumptions in this document that could be misinterpreted. Further, with the cap potentially removed as early as end-2020, and fast and reliable switching (currently expected late-2020) considered by Ofgem to be an essential condition for effective competition in the market, there may be limited time when both the price cap and the new switching arrangements are in place together. As was the case in our consultation IA, we have presented sensitivity analysis to show the impact of significantly reduced savings from

switching. The findings of that analysis are presented in Appendix 1.

Illustrative analysis for indirect consumer savings

5.10. We have modelled the three illustrative scenarios below:

- 1) Scenario 1 – based on very cautious and simple assumptions for an increase in both internal and external switching.
- 2) Scenario 2 – based on consumer survey evidence on barriers to switching
- 3) Scenario 3 – based on experience following reforms to the current account switching arrangements

5.11. The details of each scenario are unchanged from the consultation IA. Full explanations of the scenarios can be found in that document.

Results

5.12. These scenarios are intended only to illustrate what the benefits of increased engagement could be as a result of improving the switching arrangements for consumers. Each of the scenarios is not linked to a particular reform package, nor are we suggesting that each package will have an equal impact on consumer engagement and competition. While we would expect the features of RP2a to generate a larger consumer response than RP1, we have not sought to reflect this variation within this analysis.

5.13. The table below sets out the illustrative NPV consumer savings from each scenario.

Table 5.1: Summary of NPV indirect benefits to consumers estimated for the three scenarios

Scenario	NPV Consumer saving (£m)
1 – cautious assumptions, incorporating additional internal and external switching.	£339
2 – based on consumer research on barriers to switching	£511
3 – based on the experience in the current account market	£908

5.14. This illustrative analysis, repeated from our consultation IA, demonstrates that just a small change in consumer behaviour would generate large financial savings. This analysis also gives us a high degree of confidence that, even if our least optimistic estimates of the direct costs and benefits to consumers were to be accurate, the net direct costs of RP2a would be comfortably offset by these indirect benefits. Further, our sensitivity analysis in Appendix 1 demonstrates that this would be the case even if the financial rewards available from

switching are consistently half what they have been on average over the last few years. Though the same can be said for RP1, we have a lower level of confidence that this would be achieved given the potentially harmful impacts the package could have on the number of erroneous switches.

Rebound effect

5.15. An increase in switching to cheaper tariffs will mean that consumers will be able to heat and light their homes and run their appliances in the same way, but at a lower cost. This is the same outcome from the consumers' perspectives as if they had made their home more energy efficient. Ultimately, it frees up funds which can be spent on energy or other goods and services. Any resulting increase in energy use is known as the "rebound effect". A financial saving or expenditure that changes the consumption of the same energy product is defined as a direct rebound effect. Conversely, a saving or expenditure that changes consumption of other energy products or other goods is defined as an indirect rebound effect.

5.16. As our above analysis of consumer savings is intended as illustrative only, and not linked specifically to any particular package of reforms, we are unable to robustly estimate the likely level of comfort taking that would apply to each reform package. This means that, although the consumer NPV estimate would be unchanged, there is an environmental cost of increased emissions that has not been quantified or monetised at this stage.

6. Non-monetised benefits

Chapter summary

This chapter identifies the wider benefits of faster and more reliable switching from reducing barriers to switching and providing a flexible platform for the future that will be able to support innovation in products, services and market structures.

Supporting approaches to increased engagement

6.1. In a competitive energy market, it is vital that consumers can be confident that they can easily and quickly change their energy supplier. We know that the retail energy market is not working for all consumers. In particular, around 60%⁶⁷ of households have not recently, or ever, made an active choice about their energy tariff and as a result are paying more than they should. The recent CMA investigation identified significant costs to consumers as a result of a lack of engagement and consumers choosing not to switch supplier.

6.2. We know that some consumers are now being held back from switching because of concerns that something will go wrong with the switch or because the process takes too long. Implementing the proposals set out in the consultation document will lead directly to some consumers taking the decision to switch when they would not otherwise have done so and we have provided illustrative scenarios to show what that impact could be in Chapter 5.

6.3. We also know that neither speed nor reliability of the switching process are the main drivers of consumer switching. However, while faster and more reliable switching may not be sufficient on its own to drive the behaviour of the majority of the market, it is necessary to support growing consumer engagement. Those who have never switched supplier will require confidence to enter the market for the first time, and those who have had a bad experience will need to know that things have got better to try again. So in addition to the illustrative scenarios for increased switching, we would expect faster and more reliable switching to allow other approaches to increasing engagement in the market to be more successful than they would have been, or in the short term will be.

Benefits of increased competition

6.4. Not everyone needs to switch for the market to work well and for there to be wider consumer benefits because increased switching will exert additional competitive pressure on suppliers. These potential indirect, dynamic competition benefits, set out below, are significantly greater than the – still important – direct consumer benefits from faster and more reliable switching.

6.5. Increasing consumer engagement in the market is expected to generate more competition between suppliers, both for attracting new consumers and retention of existing ones. Supported by the positive impacts of other reforms being delivered in the market such

⁶⁷ [Ofgem Consumer Engagement Survey 2017](#)

as those in response to the CMA remedies, this could have a number of positive impacts for consumers:

- Increased innovation of products and services, leading to greater choice in the market and more incentives to switch suppliers or agree new fixed term deals. This impact has been reflected to some extent in the illustrative analysis of increased engagement.
- Improved customer service, coming as part of a push towards improved customer satisfaction.
- Downward pressure on prices created by increased competition will benefit all consumers, including those that remain disengaged. It will place pressure on suppliers to resist putting their SVT rates up to compensate for lost revenues as more consumers switch to cheaper fixed deals.
- Increased competition will drive suppliers and the industry to become more efficient, as consumers switch towards the more efficient suppliers that are able to maintain their prices even though increased switching reduces the average price they receive.

6.6. While it is important that we directly improve the experiences of those consumers that do engage with the market, these wider impacts that benefit all consumers are our ultimate goal. Although we are unable to quantify or monetise these impacts, we have considered what the scale of them might need to be to guarantee that our reforms pay off for consumers. We have estimated that RP2a would lead to between £250m and £350m of direct costs being passed through to consumers over an 18-year period, before any monetised benefits have been taken into account. This total investment outlay works out, on average over the appraisal period,⁶⁸ to between £0.51 to £0.72 per year for every household.⁶⁹ Therefore, for the gross costs of our reforms to be offset by the impact of increased competitive pressure, the average household energy bill would need to be reduced by less than one pound each year.

6.7. To put this into context, the CMA estimated that domestic consumers as a whole paid an average of £1.4bn a year more than they would have done under well-functioning retail markets over the period 2012 to 2015. This works out at around £50 per household per year. An average reduction in household energy bills of just one pound as a result of increased competitive pressure in the market would therefore represent just a 2% reduction in the level of consumer detriment.

6.8. As is the case with our analysis of the potential benefits of increased engagement, this additional illustrative analysis demonstrates that a very small change would be required to offset the total costs of our reforms, even in the absence of any other monetised benefits materialising. In practice, we consider that the direct impacts of the reforms, once costs and benefits have been taken into account, are broadly neutral. These wider impacts of increased engagement and competition will therefore deliver significant net benefits for consumers.

⁶⁸ As stated, these are average figures. In practice, we would expect higher costs to be incurred up front by the industry as it invests in new systems and processes, and then lower ongoing operational costs. The pass-through of costs to consumers may follow a similar pattern. See paragraph 7.8 for a more detailed assessment of this impact.

⁶⁹ Average annual cost per household = Direct cost passed through / 18 years / 27m households.

Unlocking potential future innovation

6.9. Switching currently takes on average around two to three weeks. The energy market is facing rapid technological change, including the roll-out of smart meters, the move to half-hourly settlement, increased micro-generation and the growth of peer to peer networks. We are seeing increased market entry, the rise of new non-traditional business models, and the offering of new products and services. While we cannot predict where the innovation of the future will come from, we consider that a three-week switching process will hold back innovation and act as a disincentive for new entrants. More reliable and faster switching will unlock innovation, creating more competitive pressure and improving outcomes for consumers, both in terms of price and quality of service.

6.10. In particular, we can envisage a situation in future where consumers may seek to be supplied by suppliers for relatively short periods of time, enabling them to be served by different suppliers on different days of the week. Consumers might want to power their houses from one supplier and their cars from another. It is possible that we might see the development of demand management services that source the most efficient energy for a consumer on a real time basis.

6.11. The sorts of changes in the market that we can currently envisage may require the central systems to have instant messaging to handle very fast switching, or data model flexibility to enable new kinds of relationships between different parties. While each existing industry system is individually believed to be technically capable of being adapted to deliver next working day switching and of further adapting in the future, the underlying technologies are very different, meaning that they have different strengths and different constraints. This means that the process of making changes to switching in the future would continue to be fragmented between gas and electricity, with ongoing duplication of the costs of change and the continuing difficulty of getting two governance processes to move in step. The existing separate governance regimes would also make it extremely difficult to drive change in both systems and sets of processes in the same way, and to the same timescales. We believe that it is essential to put in place registration and switching arrangements that will be capable of adapting quickly and efficiently to change. A continued reliance on the current fragmented systems and governance processes will not deliver that.

6.12. By introducing a single central system that is designed with future change in mind, we will be ensuring that the central switching systems and supporting governance arrangements can quickly and efficiently be adapted to enable transformative industry innovation that were not anticipated when the existing platforms were developed. While the existing systems may be capable of adapting to the sorts of change we can currently foresee, it would be more difficult, more expensive, and slower to do this with two registration systems with separate governance arrangements than it would with just one.

7. Summary of net impacts for consumers

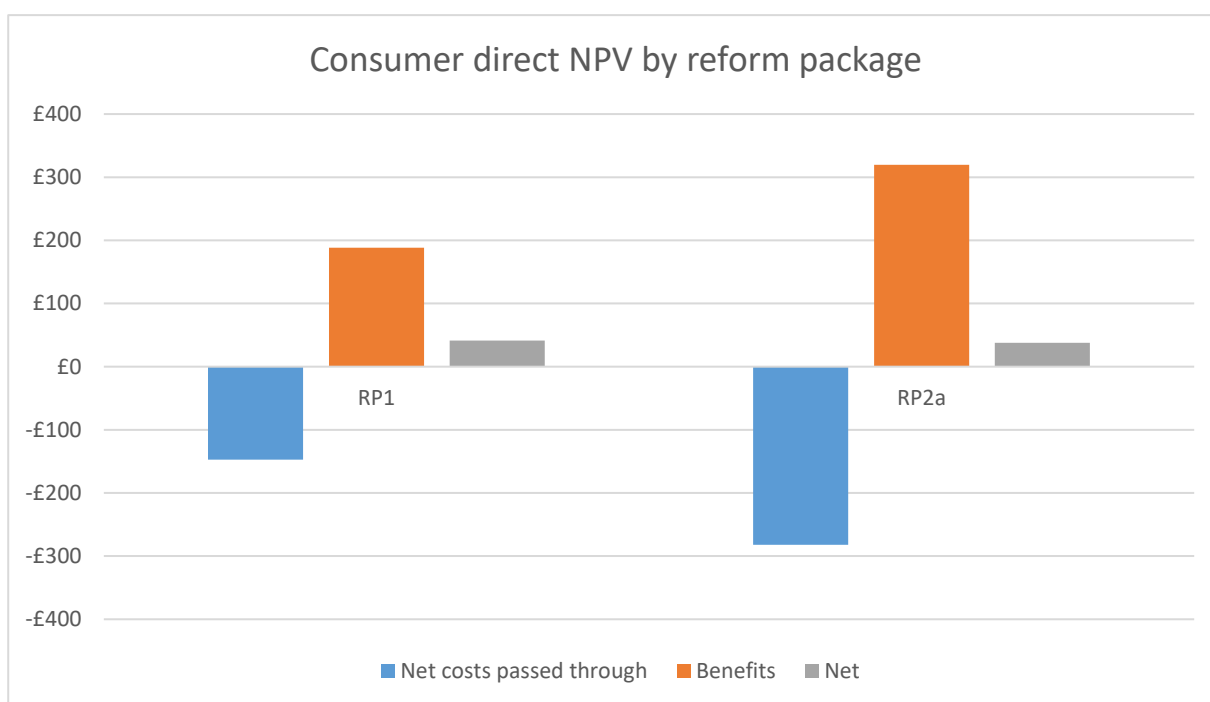
Chapter summary

In this chapter we bring together the findings of our quantitative and qualitative analysis to draw conclusions on which reform package will deliver the best outcomes for consumers. We also recognise that there will be some distributional impacts amongst consumers.

Net direct consumer impacts

7.1. We have not made any changes to the methodology for calculating the net impacts for consumers following the consultation. For more information on how this was calculated, including our assumptions for cost pass-through, see paragraphs 7.1 – 7.3 of our consultation stage IA. The updated estimates for consumer direct NPVs, reflecting the changes to the analysis outlined in Chapters 3 and 4 of this document, are set out below.

Figure 7.1: NPV to consumers from direct monetised impacts only (£m)



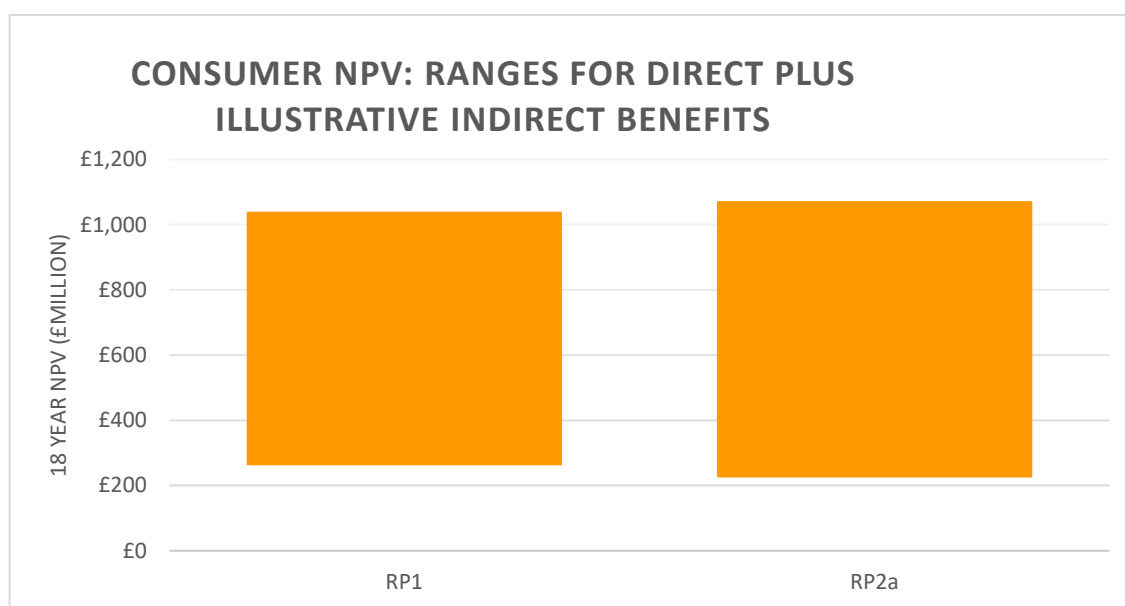
7.2. This shows that, for our central case, there is an NPV benefit of £38m for RP2a over our assessment period when just the direct impacts are considered. For RP1 there is a marginally higher positive NPV of £41m, but this does not take into account the wider potential negative implications for consumer engagement and trust that could be caused by an increased rate of erroneous switches.

Net direct and indirect consumer impacts

7.3. In the chart below we show our central case for direct consumer net benefits together with scenario 1 (our most pessimistic scenario) for indirect benefits.

7.4. We have also sought to show the potential range of impacts for consumers. We begin by combining the monetised estimates for the direct costs and benefits, to create NPV estimates for the direct impacts for consumers. By combining our most pessimistic direct consumer NPV analysis (high costs and low benefits) with illustrative scenario 1 from Chapter 5, and our most optimistic direct consumer NPV (low costs with high benefits) with illustrative scenario 3, we are able to produce an illustrative range for the net direct and indirect benefits to consumers. For RP2a, this range is from £227m to £1,069m. By design, this represents the widest potential range our analysis can produce for the reforms. We take confidence from the fact that when we draw together our most pessimistic analysis for both the direct and indirect impacts, we generate an unambiguously strong positive outcome for consumers. Rather than illustrating uncertainty over whether the reforms will deliver a positive outcome for consumers, the very wide range simply demonstrates the potential scale of the benefits that could be on offer.

Figure 7.2: NPV ranges for consumers from direct and illustrative monetised impacts only



7.5. Not only would the investment in a new CSS under RP2a offer consumers fully harmonised dual fuel switching, but the new single central system supported by a simplified governance regime would also ensure that the switching arrangements could be more efficiently adaptable to future innovation and change within the industry and be more responsive to evolving consumer expectations. A decision to implement RP1 would lock in the existing arrangements for many years to come and potentially make transformative innovation more costly and difficult to implement.

7.6. Once these three assessments have been combined (ie our monetised direct cost and direct benefits and illustrative indirect impacts), it is clear that RP2a would deliver the highest positive outcome for consumers, with the greatest level of confidence attached. RP1 could not

be expected to deliver the same level of increased engagement as it would offer the least reliable and slowest switching of the packages. It could also hold back potential future innovation and competition in the market due to the retention of existing separate systems for gas and electricity. We have therefore concluded that RP2a would have the highest net benefit to consumers over the long term.

Distributional impacts

7.7. The reforms will impose costs directly onto the industry, as well as some resource savings. The majority of the net costs will be passed through to consumers, though we cannot be sure how suppliers would choose to do this. For those consumers that are already engaged in the market, the benefits will offset the costs. For those that become engaged, or more engaged, as a result of the reforms, the financial savings will more than outweigh any small increases in energy bills.

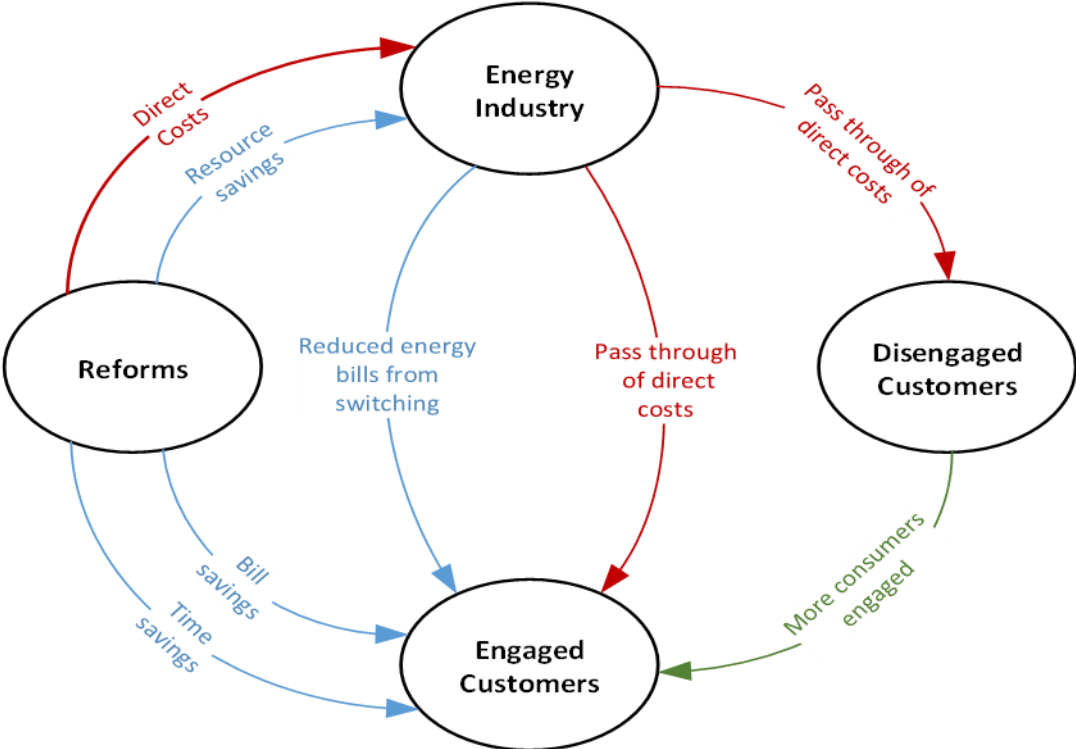
7.8. For those consumers that remain completely disengaged with the market, the reforms will introduce a small additional cost, though we do expect that this will be offset by increased competitive pressure. If 85% of the gross costs are passed through to consumers in the years that they occur, and spread evenly between 49 million customer accounts, then a dual fuel customer could expect their annual energy bill to be up to £3.50 higher during the 3-year transitional phase than it otherwise would have been, without taking account of the downward impact of competitive pressures. On an ongoing basis, once the reforms have been fully implemented, energy bills may be just 50 pence higher than they would otherwise have been, again, without taking account of the downward impact of competitive pressures. There is potential for this cost to disengaged consumers to be higher, as suppliers may seek to increase their tariffs for these consumers in response to the lower average price being paid across the market (due to increased switching away from the SVT). We expect that increased competition in the market, in particular for disengaged consumers, will negate these effects over time. This conclusion is consistent with the CMA's analysis of the expected impact of its remedies for the retail energy market, where it concluded that *'the benefits of [the CMA's] remedies will be seen in part through a reduction in the gains from switching that go unexploited by consumers. However, crucially, this would not be achieved by a levelling up of prices (a potential risk of regulatory interventions that seek to constrain price differences) but by a gradual reduction in prices towards the competitive benchmark level, as more efficient suppliers gain consumers from the less efficient'*.⁷⁰

7.9. As highlighted in Chapter 6, the reduction in household energy bills that would be required to offset these total costs would represent a very small proportion of the unnecessary charges being incurred by consumers each year.

7.10. The potential distributional impacts of the reforms are illustrated in Figure 7.3 below.

⁷⁰ CMA [Assessment of the impact of domestic retail remedies on detriment](#)

Figure 7.3: Flow chart showing the distributional impacts of the reforms to the switching arrangements



8. Conclusion

8.1. Reform Package 2a is preferred because it offers the most cost-effective solution to deliver fully on our programme objectives. Investment in a new CSS, with harmonised processes for gas and electricity would help ensure that the switching arrangements are future-proofed and capable of efficiently adapting to meet consumers' evolving expectations for many years to come. It would deliver next working-day switching for domestic consumers and two working-day switching for non-domestic consumers while offering the largest reduction in the volume of negative switching experiences, offering benefits for consumers and suppliers. Our analysis gives us a high degree of confidence that the package would deliver a large net benefit to consumers, expected to range from around £200m, potentially up to over £1,000m.

8.2. While there may be uncertainty regarding a number of the assumptions that have supported this analysis, the findings do give us confidence that even with our least optimistic assumptions there is a significant net benefit for consumers. This conclusion also remains robust in all three of our sensitivity tests set out in Appendix 1. Importantly, this estimated benefit excludes the wider impacts of increased competition and potential innovation. As these outcomes would benefit all consumers, rather than just those that engage in the market, they would be larger in scale than those we have been able to monetise.

8.3. Our analysis of the reliability improvements has revealed that, even with RP2a, it would be prudent to introduce the reforms with an initial transitional period with switching speeds of around one week. This would give us the opportunity to confirm that the improvements to address data quality have had the expected effect on the volume of erroneous transfers.

8.4. Reform Package 1 would not deliver sufficiently on our objectives to be considered an acceptable outcome for the programme. In the absence of investment in a new CSS, we would be retaining existing fragmented systems, processes, and governance arrangements that would make future change more difficult and costly to implement in an efficient manner. We would also be choosing to retain the separate systems and processes for gas and electricity when we know that the majority of consumers prefer to operate in a dual fuel market. In addition, our analysis has shown that RP1 is not capable of delivering on both more reliable and fast switching in parallel.

8.5. These conclusions are illustrated by the table below, which scores our reform packages' performance against the programme's objectives.

Table 8.1: Summary of performance of each reform package against Ofgem’s Switching Programme objectives

Programme Objectives		RP1	RP2a
1. To improve consumer experiences and perceptions of changing supplier, leading to increased engagement in the market, by delivering a switching service that:	a) Is more reliable, thereby reducing the instances of consumers being let down by delayed, unsuccessful or unwanted switches.	✓	✓✓✓
	b) Offers consumers control over when they switch, including providing the capability of doing so as fast as possible, and by no later than the end of the following day after a consumer has entered into a contract.	✓	✓✓
	c) Minimises any differences in consumer experiences of the switching process, to the extent that is possible, taking into account any physical constraints imposed by metering and issues relating to consumers’ indebtedness.	✓✓	✓✓
2) To deliver a simple and robust system architecture design that harmonises business processes across the gas and electricity markets where possible, and is capable of efficiently adapting to future requirements.		x	✓✓
3) To encourage more effective competition by minimising barriers to entry for new entrants to the market, including the extent to which a successful switch may rely on the actions of an incumbent, and by having appropriate safeguards in place where this is not possible.		✓	✓✓
Cost-effectiveness (as per the programme’s overarching objective)		✓✓	✓✓✓
Overall assessment against programme objectives		x	✓✓✓

Appendices

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Appendix 1 – Sensitivity analysis

1.1 As we have described in previous chapters, we have sought to address uncertainty in the direct costs and benefits we have monetised by developing low, central and high cases. In this appendix we describe our analysis of the impact of three key assumptions and the sensitivity of our results to variation in these assumptions. The three outcomes we have examined in our sensitivity analysis are:

- Sensitivity analysis test 1 – Delivery of the new switching arrangements is delayed
- Sensitivity analysis test 2 – The financial reward from switching is greatly reduced
- Sensitivity analysis test 3 – Data quality is less important to reliability than we thought

Sensitivity analysis test 1 – Delay to the programme

1.2 There are a range of potential risks to the successful and timely delivery of the new switching arrangements. These include the potential for slippage in programme timelines, for example due to optimism bias involved in planning, delays in procurement of the new CSS, or due to unforeseen challenges that are identified through testing of the new arrangements. Delays to public sector led investment programmes are not unusual, as illustrated by the 2002 Review of Large Public Procurement by Mott MacDonald⁷¹ that identifies there is usually optimism bias present in the planning for such programmes. On this basis, we have tested through sensitivity analysis the impact on the costs and benefits of a full year’s delay to implementation. This is made up of a six-month delay during the Enactment phase and a six-month delay during the Design, Build and Test (DBT) phase. This has three key impacts. Firstly, there will be an additional year of programme engagement costs. Second, implementation costs will be spread over a longer period. Thirdly, ongoing costs and benefits, including those that might come from increased engagement, will be delayed by one year.

1.3 For RP1 and RP2a, the key changes that we have tested in this sensitivity test are described in the table below.

Table A1.1: Summary of the revised assumptions we have adopted for Sensitivity Test 1

Reform Package	Assumptions tested
RP1	<ul style="list-style-type: none"> • To account for six-month Enactment phase delay, include six months of programme costs in 2019 (this takes the Enactment Phase up to the end of 2019). • To account for six month DBT delay, include six months of DBT costs in 2019 and conclude phase at the end of 2020. Add additional six months of programme costs and uplift industry transitional cost and central

⁷¹ https://www.parliament.vic.gov.au/images/stories/committees/paec/2010-11_Budget_Estimates/Extra_bits/Mott_McDonald_Flyvberg_Blake_Dawson_Waldron_studies.pdf

	<p>coordination and assurance costs by 30% over the period mid-2019 to end 2020.⁷²</p> <ul style="list-style-type: none"> • Move post implementation costs from 2020 to 2021. • Start operational costs in 2021.
RP2a	<ul style="list-style-type: none"> • To account for six-month Enactment phase delay, include six months of programme costs in 2019 (this takes the Enactment Phase up to the end of 2019). • To account for six month DBT delay, start DBT at beginning of 2020 and conclude phase at end 2021. Add additional six months of programme costs and uplift industry transitional cost and central coordination and assurance costs by 20%. • Move post implementation costs from 2021 to 2022. • Start operational costs in 2022.

1.4 We are reassured by the results shown in Table A.1.2 below. Although a whole year's delay to launch of the new arrangements would be costly for industry and delay the benefits being realised by consumers, there is clearly still a strong positive case for the reforms under these circumstances.

Table A.1.2: Summary of results from Sensitivity Test 1

	Central direct consumer NPV	Range including indirect savings from illustrative scenario analysis	Central direct consumer NPV with a one year delay	Range for indirect savings from illustrative scenario analysis with a one year delay
RP1	£41m	£256m - £1027m	£4m	£262m - £954m
RP2a	£38m	£218m - £1059m	-£10m	£165m - £928m

Sensitivity analysis test 2 – Reduction in the financial reward from switching

1.5 As discussed in the summary pages, a significant proportion of the direct and indirect benefits to consumers are dependent on our assumption for the savings available from switching. Within our central analysis, we have not sought to reflect the impact of the proposed price cap on default tariffs as we currently do not have any information on what the design of the price cap might be. The savings assumptions in our central analysis are therefore unchanged from our consultation IA.

⁷² Unlike programme costs, we have not assumed a linear increase in industry transitional costs to account for the six month DBT phase delay. We have assumed that over this period parties will have some ability to step down resource and delay other expenditure. We have assumed that 60% of transitional costs can be avoided. To uplift the 18 months of transitional costs expected for RP2a in our base case, we have therefore increased this figure by 20% (rather than 33% that would be required for a linear uplift). For RP1, with its shorter DBT phase in our base case of 1 year, we have uplifted this by 30% (rather than the 50% needed for a linear extrapolation). We recognise that this value would be highly influenced by the stage of the DBT phase when the delay occurred and the cause of the delay.

1.6 We do, however, repeat the sensitivity test from our consultation IA that considered how sensitive our conclusions were to the savings assumptions adopted. In future, we expect that there will be an increasingly competitive market, and that as a result we might see much lower price differentials in the market than have existed in recent years. To test against this outcome, we have repeated our analysis with much lower assumptions for the savings from switching. Specifically, we have assumed that the savings from switching (both externally between suppliers and internally between tariffs) are half what was assumed in our central analysis for the entire appraisal period.

1.7 This analysis enables us to consider whether our reforms would continue to reflect good value for money for consumers in the event that price differentials are greatly reduced in future.

Table A.1.3: Summary of results from Sensitivity Test 2

	Central direct consumer NPV	Indirect savings from Scenario 1 (most pessimistic scenario for increased consumer engagement)	Central direct consumer NPV with reduced savings assumptions	Indirect savings from Scenario 1 with reduced savings assumptions
RP1	£41mn	£339m	£0	£169m
RP2a	£38m		-£18	

1.8 This analysis demonstrates that even if the savings available from switching are consistently just half of what they have been on average in recent years, RP2a would be expected to deliver a large net benefit to consumers even with a very small increase in consumer engagement as assumed in Scenario 1. Regardless of this conclusion, the key driver for Ofgem’s intervention would continue to be the benefits of increased competition and innovation that have not been monetised. While the above analysis gives us increased certainty regarding the monetised benefits being realised, we would in any case have continued to believe that the non-monetised benefits to consumers would justify the costs.

Sensitivity analysis test 3 – Data quality is less important to reliability than we thought

1.9 From a consumer perspective, the most essential outcome from our reforms is that switching is reliable, and so consumers can have confidence they can engage in the market without something going wrong. Our reliability analysis suggests that, for erroneous switches in particular, there is a material residual risk that the harm caused by moving to faster switching may outweigh the benefits of improving data quality. This is because there is currently a high volume of erroneous switches that are identified and withdrawn during the existing long switching window. Though our central analysis for RP2a suggests a net reduction in erroneous switches, there is some uncertainty involved. For this reason we have introduced a transitional period into our plans, where we will expect switching speeds of around one week, before moving to next day switching once we have tested performance and the

effectiveness of our reforms.

1.10 The introduction of a transitional period gives us comfort so long as we identify the appropriate slower switching speed to implement temporarily. It is important we are confident that our reliability improvements, when coupled with switching speeds of one week during the transitional period, will result in reduced erroneous switches. We have therefore tested this by varying one of the most influential assumptions within this analysis, which is the proportion of the underlying problem that is currently caused by data quality issues. If we have overestimated this, we will also have overestimated the impact our data improvement can have on the volume of erroneous switches. Given that our central assumption was based on data on the reasons recorded for erroneous switches, we do not believe that there is scope for being wrong by a large margin. However, we have had to take account of the proportion of incorrect MPANs selected that were solely down to human error. In our central analysis we had assumed, based on supplier feedback, that roughly 12% of incorrect MPAN selections were solely down to human error. In this sensitivity analysis we have assumed that 25% of them are down to human error. This gives an assumption of 64% for the proportion of ESs caused by poor address data quality, rather than our central assumption of 75%. Adopting this assumption yields the following results.

Table A.1.4 Summary of results from Sensitivity Test 3

	Central estimate for net impact on annual volume of domestic erroneous switches in transitional phase (1 week switch)	Central estimate for net impact on annual volume of domestic erroneous switches in steady state	<u>Sensitivity test</u> - Central estimate for net impact on annual volume of domestic erroneous switches in transitional phase (1 week switch)	<u>Sensitivity test -</u> Central estimate for net impact on annual volume of domestic erroneous switches in steady state – sensitivity analysis
RP1	-8,259	20,635	-4	31698
RP2a	-25,580	-12,841	-14,784	5043

1.11 This analysis emphasises the risk that, even with RP2a, faster switching could lead to an increase in erroneous switches if our data-improvement work does not have the impact we expect. This validates our proposals to introduce the transitional phase. The analysis shows that even with this revised assumption, a one-week switch gives us a high level of confidence that there will be a reduction in erroneous switches under our preferred option. If results of these nature are found in practice, further action will be required to improve reliability before we can move from one-week switching to next-day switching.

Appendix 2 – Assumptions log

2.1 The full [Assumptions Log](#) has been published separately on our website.

2.2 Changes to the assumptions used under the base case are described in the table below. These new assumptions are also reported in the Assumptions log, alongside other assumptions for the base, low and high cases.

Table A.2.1: Changes made to assumptions under the base case

Notes: Ref column refers to the number contained in the Assumptions Log for that specific assumption. N/A in the Ref column refers to assumptions that are no longer relevant and therefore are not included in the Assumptions Log.

Ref	Area of analysis	Input requiring assumptions	Consultation stage assumption	Updated assumption	Reason for change
36	PCWs transitional costs RP1/RP2a	Number of PCWs which allow consumers to switch supplier	10	16	No transitional costs were quantified in the consultation stage IA for RP1 and RP2a. Additional information was received from PCWs which resulted in changes to assumptions.
39 - 40	PCWs transitional costs RP1/RP2a	For each PCW, total number of weeks required to establish/ amend interfaces	0	20	No transitional costs were quantified in the consultation stage IA for RP1 and RP2a. Additional information was received from PCWs which resulted in changes to assumptions.
63 - 64	Programme costs	Number of meeting-design workstream 2018	11	4	Based on further understanding of work required to deliver new arrangements under the different reform options.
63 - 64	Programme costs	Number of meeting-design workstream 2019	12	2	Based on further understanding of work required to deliver new arrangements under the different reform options.
N/A	Programme costs	Number of meeting-design workstream 2020	13	0	Based on further understanding of work required to deliver new arrangements under the different reform options.
65	Programme costs	Number of meeting-delivery workstream 2018	11	6	Based on further understanding of work required to deliver new arrangements under the different reform options.
66	Programme costs	Number of meeting-delivery workstream 2019	12	12	Based on further understanding of work required to deliver new arrangements under the different reform options.
67	Programme costs	Number of meeting-delivery workstream 2020	13	12	Based on further understanding of work required to deliver new arrangements under the different reform options.
68	Programme costs	Number of meeting-delivery workstream 2021	0	6	Based on further understanding of work required to deliver new arrangements under the different reform options.

69	Programme costs	Number of meetings-commercial workstream 2018	11	8	Based on further understanding of work required to deliver new arrangements under the different reform options.
70	Programme costs	Number of meetings-commercial workstream 2019	12	2	Based on further understanding of work required to deliver new arrangements under the different reform options.
N/A	Programme costs	Number of meetings-commercial workstream 2020	13	0	Based on further understanding of work required to deliver new arrangements under the different reform options.
71	Programme costs	Number of meetings – regulatory design workstream 2018	11	18	Based on further understanding of work required to deliver new arrangements under the different reform options.
72	Programme costs	Number of meetings – regulatory design workstream 2020	13	12	Based on further understanding of work required to deliver new arrangements under the different reform options.
74	Programme costs	Number of meetings – security 2018	0	12	Based on further understanding of work required to deliver new arrangements under the different reform options.
75	Programme costs	Number of DBT governance meeting-delivery 2019	No previous assumption made	24	Based on further understanding of work required to deliver new arrangements under the different reform options.
76	Programme costs	Number of DBT governance meeting-delivery 2019	No previous assumption made	48	Based on further understanding of work required to deliver new arrangements under the different reform options.
77	Programme costs	Number of DBT governance meeting-regulatory 2018	No previous assumption made	12	Based on further understanding of work required to deliver new arrangements under the different reform options.
78	Programme costs	Number of DBT governance meeting-regulatory 2019	No previous assumption made	12	Based on further understanding of work required to deliver new arrangements under the different reform options.
79	Programme costs	Time spent attending meetings and reviewing material by attendee (day)(all workstreams-except TDA)	2	1.5	Change due to our increasing use of teleconferences and webinars to involve industry in our work and it will therefore reduce time spent travelling to and from meetings.
80	Programme costs	Number of SPDG meetings 2018	12	8	Based on further understanding of work required to deliver new arrangements under the different reform options.
82	Programme costs	Number of SPDG	13	12	Based on further understanding of work

		meetings 2020			required to deliver new arrangements under the different reform options.
83	Programme costs	Number of SPDG meetings 2021	0	6	Based on further understanding of work required to deliver new arrangements under the different reform options.
87	Programme costs	Number of SPSG meetings 2021	No previous assumption made	2	Based on further understanding of work required to deliver new arrangements under the different reform options.
88	Programme costs	Number of TDA meetings 2018	6	12	Based on further understanding of work required to deliver new arrangements under the different reform options.
89	Programme costs	Number of TDA meetings 2019	6	5	Based on further understanding of work required to deliver new arrangements under the different reform options.
N/A	Programme costs	Number of TDA meetings 2020	6	0	Based on further understanding of work required to deliver new arrangements under the different reform options.
100	Programme costs	Industry resources to support design and legal drafting 2018	£1,595,000	£1,476,500	Based on new information provided by industry code bodies.
101	Programme costs	Industry resources to support design and legal drafting 2019	£1,012,500	£913,750	Based on new information provided by industry code bodies.
102	Programme costs	Industry resources to support design and legal drafting 2020	£212,500	£519,375	Based on new information provided by industry code bodies.
103	Programme costs	Number of industry codes requiring modification (SEC, MRA, DCUSA, SPAA, UNC, DTS, BSC)	No previous assumption made	7	Based on our understanding of industry codes.
104	Programme costs	Number of meetings of Code Panels to approve/discuss modifications 2019	No previous assumption made	2	Based on our understanding of code modifications requirements to deliver new arrangements under different options.
105	Programme costs	Number of members of each Code Panel 2019	No previous assumption made	10	Based on our understanding of code modifications requirements to deliver new arrangements under different options.
106	Programme costs	Time spent preparing per meetings and	3	3	Based on our understanding of code modifications requirements to deliver new

		reviewing material by member of Code Panel (days)			arrangements under different options.
130 - 131	Reliability analysis	Annual number of rejected domestic switches	Gas: 385,000 Electricity: 57,750	Gas: 290,000 Electricity: 70,000	Based on data held by Ofgem for 2016. Previous assumption was an estimate based on data gathered through our January RFI.
132 - 133	Reliability analysis	Proportion of rejected switches caused by poor address data quality	15%	Gas: 10% Electricity: 0%	Our review of the data for reported reason codes suggests there are no electricity rejections based on identifying the correct meter point and/or postcode. For gas, the proportion is around 10%.
140	Reliability analysis	Valuation of harm caused to a consumer by a delayed switch	For domestic consumers, 1 hour of non-work time wasted, valued at £5.59 ph. For non-dom, 1 hour of work time valued at £14.59.	Total inconvenience valued at £30.	An inconsistent approach was adopted between delayed and erroneous switches. Approach did not take account of the full impact of a delayed switch. Revised assumption has been linked to the value of compensation paid to consumers through the Guaranteed Standards as redress to offset inconvenience for poor service.
152	Faster access to improved terms	Proportion of switches not requested in time by highly engaged consumers to avoid lapsing onto the SVT	60%	15%	Revised to take account of the licence obligation that seeks to prevent suppliers charging the default tariff where a consumer requests a switch within three weeks after the end of their fixed term deal.
155	Faster access to improved terms	Proportion of consumers that will avoid expensive default tariffs throughout our appraisal period	6%	10%	Adjusted upwards to take account of the relaxation of rules around auto-rollover. Suppliers are now allowed to automatically roll their customers onto new fixed term deals.
171	Consumer time savings	Annual number of unique consumer switching journeys	4.6m	5.05m	Correction for an error in the previous calculation. Based on assumption that 70% of meter point switches are part of a dual fuel switch. This suggests there are 2.72m dual fuel switch requests and 2.33m single fuel requests each year.