HOUSE OF COMMONS

# Business, Energy and Industrial Strategy Committee

## Oral evidence: Rolling out smart meters, HC 1851

Wednesday 9 January 2019

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Watch the meeting

Members present: Rachel Reeves (Chair); Vernon Coaker; Drew Hendry; Stephen Kerr; Peter Kyle; Sir Patrick McLoughlin; Albert Owen; Mark Pawsey; Antoinette Sandbach; Anna Turley.

Also attended: Caroline Flint (Member of the Public Accounts Committee)

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### Witnesses

I: Audrey Gallacher, Director of Policy, Energy UK; Dhara Vyas, Head of Future Energy Services, Citizens Advice.

II: Claire Perry MP, Minister of State for Climate Change and Energy, Department for Business, Energy and Industrial Strategy; Daron Walker, Director of Smart Meters and Smart Systems, Department for Business, Energy and Industrial Strategy; Rob Salter-Church, Director, Retail Systems Transformation, Ofgem; Richard McCarthy, Chair, Smart DCC.

# Examination of Witnesses

Witnesses: Audrey Gallacher and Dhara Vyas.

**Chair:** Thank you very much to Audrey Gallacher and Dhara Vyas for coming to give evidence to the Select Committee this morning. We have two sessions this morning, first with the both of you, and the second one with the Minister and officials. Obviously the rollout of the smart meters is an incredibly important issue, and we appreciate you coming to give your time today. We have a number of questions, and we will start this morning with Albert Owen.

Q1 **Albert Owen:** Thank you very much, Chair. Happy new year to you both, and welcome. The opening question really is this: do you broadly support the conclusions of the National Audit Office's recent report on smart metering? We have had a briefing on it and read the conclusions. What is your view?

***Audrey Gallacher:*** Yes. It is a really accurate, well-considered, balanced, fair report. There is nothing in it that I do not recognise in terms of the findings, and I think the recommendations are the right ones for the industry.

Q2 **Albert Owen:** Do you think they are strong enough for Government to take real notice?

***Audrey Gallacher:*** There are some absolutely critical ones at the moment. There is a big issue around ensuring the costs and benefits of the programme are stacking up, and we are doing it in the most efficient way. It is really important that we have transparency around those costs that will help make decisions on the programme going forward. For our members, there is a big issue about not just what happens when you get to 2020 and however many meters have been installed; it is about how we actually complete this roll-out.

The big benefit and the big prize here is making sure we get as much penetration as possible to transform the industry, and allow the smart and flexible energy system of the future that we need. It is really, really important that we understand what that looks like, and what the policy and regulatory framework is like, so we can get the thing finished.

Q3 **Albert Owen:** For the practical roll-out, do you think the SMETS1 meters will eventually match the functionality of SMETS2? Do you think that is doable from the industry's perspective?

***Audrey Gallacher:*** The plan, as you will no doubt know from the NAO report, is that the meters will be enrolled into the central system, the DCC system. There is not really any obvious issue or difference for customers right now, apart from the interoperability issue, if you change supplier and lose functionality. When it is in the DCC, that should be addressed.

Q4 **Albert Owen:** That is quite an issue, is it not? It is slow. People are not turning up. Smart meters are now going back to become dumb meters. There are massive issues here.

***Audrey Gallacher:*** At this moment in time, yes, of course. That will be addressed in the longer term when the meters are enrolled. There are probably some issues—

Q5 **Albert Owen:** When you say "longer term", are you saying past 2020, and how much past 2020?

***Audrey Gallacher:*** The plan at the moment is that the first tranche of SMETS1 metering equipment will start to be enrolled into the DCC in May 2019, so May this year. Right now, two-thirds of them are in the plan. The final third of meters are still to be decided on. There is going to be a consultation on that by the Government this year, but the plan is that they will all be enrolled by October 2020. I must say, though, that that is a very, very challenging timescale.

Q6 **Albert Owen:** What about from the consumer's perspective and Citizens Advice?

***Dhara Vyas:*** As you know, we are the statutory energy watchdog, and we have been closely involved in the smart meter roll-out for many years now. I thought that the NAO report picked up on the right things. Our two primary concerns are not dissimilar to Energy UK. They have been around the timescales. The rush to a deadline of 2020 is having an impact on the consumer experience of the installations. It is important that quality and cost are prioritised over speed of delivery at this point. The programme has experienced some significant delays and those have not been reflected in that timescale, which could possibly mean more of an impact on the way that consumers experience installations.

Q7 **Albert Owen:** Would you like to share a little about their experiences so far?

***Dhara Vyas:*** Yes, I am really happy to. In 2017, in local offices, we had about 78,000 customers contacting us with energy issues, and about 61,000 contacts to our consumer service. Contacts about smart meters have always been a proportion of those. They are not always in line with the proportion of people who have smart meters, because, as you are probably well aware, most people with smart meters really like them. They are a good thing, particularly for prepay customers. When you have a smart meter and it works, it is transformative. It really changes your experience, so they are a good thing. For those people who experience problems, they can be quite significant. Lots and lots of people contact us with issues around billing. They were promised an end to estimated bills and more accurate bills, and that has not happened. That is an issue.

Q8 **Chair:** Why is that, then?

***Dhara Vyas:*** The smart meter has not configured properly or it has not been updating. Those are technical issues.

Q9 **Chair:** Is that because they are rushing to install them and not doing their job properly?

***Dhara Vyas:*** I would not say that, and I would let Audrey answer on what the reasons are.

Q10 **Albert Owen:** Before you do, you said some people are really happy with them. Is it because they are saving money, or is it just that they like playing with a digital thing that they have in their hands? That is the purpose, is it not, to have consumer benefit?

***Dhara Vyas:*** People like being able to see what they can use. We have to remember that this is an industry, and meters are one of the last analogue things in people's homes. It is a really important programme, because digitising the energy market is an enabling technology. It is not the end point. It is not about the meter in the home; it is about what it will lead to, which is why we have been supportive of smart meters and the roll-out. It should herald the dawn of the future energy market that we need.

Q11 **Albert Owen:** Just to press you, are people contacting you saying that they are already receiving benefits?

***Dhara Vyas:*** People do not contact us with good stories.

Q12 **Albert Owen:** No, that is why I picked you up when you said they were really happy. If I am really happy, I do not usually phone somebody up and tell them.

***Dhara Vyas:*** People contact us when they have a problem, obviously, and what we do is twofold. We commission research, and our research generally coincides and agrees with a lot of research that the BEIS Department and others commission. It corroborates the fact that most people with them do like them. With our research and with contacts to the consumer service, we try to understand the people who experience problems, to work with those things that we identify via the consumer service and via contacts to local offices, and through our research, to identify issues. We take them up bilaterally with suppliers when there are concerns, if there is a problem or some sort of issue that we see as specific to one supplier.

We also try to identify systemic issues that are impacting across the industry, and we will then work with Energy UK or BEIS to tackle those issues. In relation to issues, it is a huge programme. It is a complicated programme. There will be problems. It is really important that we are working to address those before they are being installed at a really high rate, where more and more things are likely to go wrong.

Q13 **Albert Owen:** Okay, but at the beginning of 2019 do you have updated research that you could share with us?

***Dhara Vyas:*** Do you mean figures?

Q14 **Albert Owen:** Yes.

***Dhara Vyas:*** We have commissioned some right now, so I am very happy to come back to the Committee if you want to see them.

**Chair:** That would be very helpful, thank you.

Q15 **Stephen Kerr:** On the progress of the project, it is behind schedule. Why is that?

***Audrey Gallacher:*** As Dhara has mentioned, it is a hugely complex undertaking. It is the first time it has ever been done. This technology does not exist anywhere in the world. We are one of the only countries that have decided to roll out gas smart meters. This was set out quite clearly in the NAO report; if you look at that whole ecosystem and all of the different devices that have to speak to one another, it was a complex process. The timelines have not been met because problems were identified during testing. You could argue that we or the Government were too ambitious in that timeframe, given the complexity and size of the undertaking.

Q16 **Stephen Kerr:** What is different about our smart meters from the smart meters that are being used elsewhere in Europe?

***Audrey Gallacher:*** Lots of countries have only rolled out electricity meters. We are doing gas and electricity, with a communications hub between them. We have a central communications infrastructure to allow interoperability and change of supplier.

Q17 **Stephen Kerr:** So the way we are doing it is unique in respect of the DCC. That is massively delayed, is it not? What is your assessment as to why that is so delayed? Was the technology that was going to be used known before we got on board with the DCC as a concept?

***Audrey Gallacher:*** The specification was set out, and that specification has been subject to some changes along the way. Things are put in place. We start the testing and defects are found. You have to then revisit that specification.

Q18 **Stephen Kerr:** It is an inordinate delay, though, is it not? It is six years behind and it is still not functional.

***Audrey Gallacher:*** There is absolutely no doubt that there have been delays. I know you have DCC in and it can account for some of this. Our issues have been on things like ensuring that we can start testing on actual meters rather than emulators. That was one of the early issues that meant the development of the software and infrastructure was delayed somewhat.

Q19 **Stephen Kerr:** What has held up the SMETS2 meters, then? SMETS1 was supposed to be interim: "Get ready; get set; go". SMETS1 was supposed to be temporary. Then it was supposed to be SMETS2, and to date there are very few SMETS2 meters.

***Audrey Gallacher:*** There are about 250,000 as I understand it, which is a lot lower than SMETS1 meters and a lot lower than you would have anticipated at this point in time based on the original project plan.

Q20 **Stephen Kerr:** Was that technological? Do they just not work?

***Audrey Gallacher:*** The meter specification is less mature than it should have been to allow mass roll-out. That is about how the meters have interacted with the DCC, the communications and the data service providers. It is about making sure that the whole thing works end to end, and that has just taken a whole lot longer and been a whole lot more complicated than I think was ever envisaged, and that is because the specification was really tight. It was a really high specification, as you would want it to be, but it just means that it has taken a whole lot longer to get it off the ground. Please do not be under any illusion: everybody—meter manufacturers, energy suppliers, the DCC—has been working really, really hard to deliver this but it has been delayed, as you say.

Q21 **Stephen Kerr:** You say very confidently that the SMETS1 meters will begin to be adopted by the DCC this year, but we have heard this before, have we not? This is part of the delay. You sounded confident, but give us the confidence you have. Why do you think it is going to start this year, when it did not start last autumn or the previous spring?

***Audrey Gallacher:*** Are you asking whether it is hope over expectation?

Q22 **Stephen Kerr:** I believe in hope, but give me some substance for my hope.

***Audrey Gallacher:*** There is a project plan in place. As I understand it, BEIS has seen a demonstration of the initial operating configuration on SMETS1 meters. I have not seen it myself, but I have heard about it. There is a plan in place. I do not think all SMETS1 meters in that tranche are going to be in on 1 May; it will be a gradual process. We are told that that is the day that things will start. It remains to be seen. Of course there have been delays, because we were expecting it back in November. That is the current project plan. It has been demonstrated, but we would be irresponsible not to have some concerns over whether that can be delivered.

Q23 **Stephen Kerr:** Have you really been too optimistic about the idea that the adoption is going to start, or that all the SMETS1 meters will eventually be adopted?

***Audrey Gallacher:*** You would want to see it. The issue we have is that we are not currently seeing it in live operations in practice right now.

Q24 **Stephen Kerr:** As a last question, the Government had an objective in 2013 that every establishment would have a smart meter by 2019. A year later it became 2020, and then for some reason in 2016 they decided everything should be sped up. Has that caused problems?

***Audrey Gallacher:*** You cannot imagine that the delays at the beginning are not going to have a knock-on effect at the end. A lot of our members, the larger ones, said at the outset that this was a programme that would probably take about five years to roll out. If you work back on the timeframe from when the DCC is going to be available to operate at scale, that is going to be tight. We have a lot more SMETS1 meters than were ever envisaged.

**Stephen Kerr:** Millions more, yes.

***Audrey Gallacher:*** That is because companies have been under an obligation to install as many smart meters as they possibly can by 2020. That deadline has had an impact.

Q25 **Stephen Kerr:** Do you have any insight as to why in 2016 the Government, not having the SMETS2 green light, decided to press on with SMETS1 knowing the inadequacies?

***Audrey Gallacher:*** To be fair, decisions have been made with the absolute best intentions. I am sure you know that. It was important that SMETS1 was done. I do not want to labour the point about how complex it is, but it is not just making and manufacturing a new specification of meters. It is procurement, recruiting staff and training them up. It was important that those things were put in place by suppliers that would help in the long term for the mass roll-out, if you know what you are doing and you are doing it more efficiently and effectively.

I also do not think we would be at the point where we could be rolling out 20,000 SMETS2 meters now if we had not done that on SMETS1. A lot of stuff was learned in that, and companies that were doing that did a whole lot of pipe cleaning around how the programme could progress. We had to do it, and it was beneficial when we needed it. The big question is whether we needed 11 million, and we have those because companies have been under a lot of pressure to continue rolling out smart.

Customers like them. Customers have the benefits right now. They have not had the long-term benefits that we are talking about around energy transition, but people like them. They are saving money. They are reducing their energy consumption.

**Stephen Kerr:** I quite liked mine until I changed supplier and suddenly it did not work any more.

**Caroline Flint:** What is your evidence that they are saving money? As far as I can work out no distributional analysis has been done by the Government into the different types of families and households that are using these. In fact, I am a bit concerned that neither of you have mentioned that the overall increasing costs of this project are spread evenly across all bill payers, including people on prepaid meters.

**Chair:** We are coming on to that issue about the distributional analysis. Anna Turley wants to ask about that in a bit.

Q26 **Mark Pawsey:** I wonder if I could keep on questions with Audrey Gallacher. If you look at the basic principles of why we have introduced this programme, it was essentially to encourage consumers to save energy. You have just told us that you believe there are lots of consumer benefits, but I am interested in how much the industry will save. In the original principles 49% of the quantified benefits were supposed to accrue to the industry, which the industry would then be able to pass on to consumers, but you have already told us that the programme is taking much longer than was anticipated. It has been much more complicated and the costs have risen. My question to you is whether the benefits are ever going to be realised.

***Audrey Gallacher:*** From the original benefits case, we are in the period where costs have been accrued. The benefits come later, after the roll-out has been completed. Those benefits will be delayed or deferred.

Q27 **Mark Pawsey:** So you are saying the benefits will still be there; they will just come much later on in the programme than was originally anticipated.

***Audrey Gallacher:*** As I understand it, yes, but we have been calling, for a couple of years now, for an updated benefits case.

Q28 **Mark Pawsey:** You said that is as you understand it, but is it your assessment that the savings that were originally anticipated by embarking on this highly ambitious programme are going to be realised?

***Audrey Gallacher:*** We have some evidence from analysis that Smart Energy GB has done, and some monitoring that our members have done, on how customers have changed their behaviour and what people's views are on smart meters.

Q29 **Mark Pawsey:** I am interested specifically in the savings that industry is able to make as a consequence of the programme. That was estimated to be 49% of the benefits. Are those savings and benefits that were originally anticipated going to be realised—yes or no?

***Audrey Gallacher:*** I am hopeful that they will be, but we have not had an updated impact assessment.

Q30 **Mark Pawsey:** You have nothing more scientific than the fact that you are hopeful that they may be. We are all hopeful that they may be. You are involved in this sector; I am asking you for your opinion as to whether they are likely to be realised.

***Audrey Gallacher:*** We know fewer customers complained, so there has been improved customer service.

Q31 **Mark Pawsey:** I am not bothered about the customers right now. I am concerned about the suppliers. Are the suppliers getting the savings that were originally anticipated from the programme? Are they going to get the savings?

***Audrey Gallacher:*** I would need to come back to you on what the figures are on savings right now, but we knew from the original impact assessment that the savings would not happen yet because the roll-out is incurring costs. We do know about reduced complaints, reduced customer contact and more satisfaction.

Q32 **Mark Pawsey:** When do you expect that the savings will be realised, by what date?

***Audrey Gallacher:*** The original impact assessment says that the big savings would start coming through in 2020 and 2021.

Q33 **Mark Pawsey:** Do you still believe that is the case?

***Audrey Gallacher:*** They could be delayed, which is why we are asking for an updated cost-benefit.

Q34 **Mark Pawsey:** How long do you think they will be delayed? When do you think the savings will be realised?

***Audrey Gallacher:*** You will start seeing savings, but it is about when you get the full savings. The current business case is up to 2030.

Q35 **Mark Pawsey:** When do you expect the full savings of 49% of the benefits to be realised?

***Audrey Gallacher:*** Sorry, I do not have that. I would need to come back, which is why we want an updated impact assessment. Right now, the benefit case goes out to 2030.

Q36 **Mark Pawsey:** So it could be as late as beyond 2030 that there will be any benefits to the suppliers of the system.

***Audrey Gallacher:*** No, the benefits will accrue as the roll-out progresses. One of the big challenges we have is that you do not want to run two systems. You do not want to have a dumb system and a smart system. You do not want to have customers with different metering configurations, because you have to train up staff. There are big inefficiencies there. The real thing we are looking for is to get everybody on the smart system so that we are operating a single system, and then those benefits can come through. If there is a delay in getting everybody there, that might ultimately impact on when the full savings are delivered, but there will be incremental savings throughout.

Q37 **Mark Pawsey:** This may come in a further question, but you are expecting that every household, 100% of households, will have a smart meter by the end of the roll-out.

***Audrey Gallacher:*** There is a difference between the roll-out and where we are going. Imagine a 60 watt lightbulb. You do not get them any more. At some point in time, this will be normalised and smart meters will be the gas and electricity meters that you get. In the fullness of time, I would hope that every premises would have one.

Q38 **Chair:** One of the issues is that the cost-benefit analysis has not been updated despite the fact that the roll-out is not going as planned. It is the responsibility of the Government to publish that, but it would be useful, Audrey Gallacher, if from your members you could get to us, even if it is indicative, whether they are experiencing that. One of the issues the NAO has raised is that it is costing more. Despite the fact that both of you have said customers who have them like them, the take-up has not been as high as expected. It has not been as easy to fit them into some properties as hoped. For those reasons, Mark Pawsey is right to suggest that the benefits to industry are perhaps not as great as those expected in the cost-benefit analysis. We hope the Government will update that analysis this year, but anything you could give us on that would be very helpful.

***Audrey Gallacher:*** Yes, definitely.

Q39 **Drew Hendry:** Good morning. Dhara, what is your assessment of the way consumers have been affected by the roll-out?

***Dhara Vyas:*** I am not going to labour the point that most people with them like them. From contacts to us, I have the figures for the full year 2017. We had about 3,000 smart meter contacts in 2017, and there was quite a range of issues that people contacted us about. Some of the ones that were most frequently reported to us were aggressive sales practices from suppliers who were quite eager to get smart meters installed, missed appointments and incomplete or aborted installations, which waste people's time. It makes people feel very negative, because they think, "Well, I am not going to take the morning off work again. That was pointless".

As I have touched on earlier, despite having smart meters installed customers might still have difficulty getting accurate bills. That is down to a range of issues, including where there is no network service to take the remote reading, a gas meter cannot communicate with the comms hub, or if they lose smart functionality when they change suppliers. People contact us then. We also get contacts from people saying, "I have asked for a smart meter and I cannot get one". That is one of the issues with having SMETS1 meters and now SMETS2 meters, and with SMETS1 meters being enrolled at different times.

On that point, there has not really been enough information around the cost of enrolment and adoption, and the rationale for the speed with which it is happening. We are concerned that that might add more to cost as well, and that is not something that has been raised. On the messaging to consumers, it is very hard, because it is a different answer depending on where you live or, more importantly, who your supplier is, whether they are installing in your area and what type of meter they are installing.

Q40 **Drew Hendry:** You spoke earlier about people liking them. We have heard that a lot of the SMETS1 meters have actually gone dumb because

people have switched. Obviously that will affect people. Is that an issue that has been raised with you?

***Dhara Vyas:*** Yes, it is. People contact us saying they are unhappy, they did not think that was what would happen and they did not really understand, because some suppliers are able to operate with that smart meter system operator. Some meters can stay smart because suppliers have agreements between them, but again it is a market that has rapidly changed during this entire roll-out. There are now far more suppliers, and they all have separate agreements with different smart meter systems operators.

Q41 **Drew Hendry:** Would it be fair to say it is a bit of a lottery for people when they have a SMETS1 meter?

***Dhara Vyas:*** It is a bit of a lottery. It is really hard to navigate and to understand, because you have to know what meter you have, who the system operator is, and then whether the supplier you are changing to has a contact with them and will be able to operate your meter in smart mode. Very few consumers are that savvy. I do not think I am.

Q42 **Drew Hendry:** You mentioned right at the beginning of the reply that people are feeling under pressure, with pressure sales to take the smart meters on. Is that quite a big problem in the reports?

***Dhara Vyas:*** There was a period last year where that was a bigger problem. The Department, Ofgem and Energy UK worked together to quite quickly address the issues that a couple of suppliers had, to do with that. It is not a mandatory roll-out, and consumers should know that they can refuse to have one if they do not want one, but equally suppliers are under a lot of pressure to get them installed. Suppliers should be allowed to test various communication methods, but if a consumer clearly says they do not want one that should be accepted and noted, and they should not be approached again, or there should be an agreement as to when they might be approached again.

Q43 **Drew Hendry:** Do you feel the industry has now got to that stage, or is there still a problem with pressure on people?

***Dhara Vyas:*** The industry has done a lot to tackle the issue. There is going to be more pressure in the coming months and years. It is going to be a live issue that we stay on top of.

Q44 **Drew Hendry:** What is the biggest effect on the consumers that we should have seen that is not happening, in your view? What is the biggest result for the consumer that is not happening at the moment?

***Dhara Vyas:*** Broadly, right now, we should be seeing SMETS2 installed at scale. Generally, it is the delays that have been experienced. There has been talk about the impact on costs. The NAO has found that it is going to cost another £17 per household. That is potentially going to be even greater, particularly in relation to marketing costs that suppliers will have in trying to attract people and encourage people to take them.

Q45 **Drew Hendry:** As a final point on that cost that you mentioned there, the £17, do you have an estimate or an idea of what it might be?

***Dhara Vyas:*** We have been asking the Department over the last few years for an updated cost-benefit. The last one was done in 2016, and so much has changed since then. There is a real information gap here, and it impacts on us being able to do our job as the watchdog.

Q46 **Anna Turley:** I would like to pick up on the points Caroline raised earlier about the potential for unequal distribution of the benefits of this. There are two approaches to that. One is around use and accessibility, and the other is around cost-benefit in particular. The Department has said that vulnerable consumers, particularly those with disabilities, are often understood to require additional assistance. We have heard of people who are perhaps intimidated by the new technology and do not quite know how to use it or get the benefits of it. Have you seen any efforts from the industry to support disabled and vulnerable customers in the use and accessibility of it?

I would also like to focus on the cost and the savings of that, because as Caroline mentioned they are unlikely to be evenly distributed. It is going to be a fairly flat rate. We also know that often the most vulnerable people in poverty are living in the most energy inefficient homes, private rented sectors and so on. Do you feel at the moment that the benefits are evenly distributed, and does that give you cause for concern?

***Dhara Vyas:*** On your first point about vulnerable consumers, over the years we have done quite a lot, working with industry, to give extra support to vulnerable consumers. In the last few years, we have had less of a focus on that because there have been other issues with the roll-out that we have been concentrating on. There are a number of issues to highlight. One is that this is a really good opportunity for suppliers to make contact and interact with every single person they supply energy to. If that is done well, it is a really good opportunity for them. One of those is to note vulnerability where they did not know that there was someone in vulnerable circumstances in a household.

In terms of actual interaction with smart meters, while some vulnerable consumers, or consumers in vulnerable circumstances, stand to benefit the most from having a smart meter, such as in the prepay example I gave earlier about how it can transform the way you interact with energy, we have never wanted them to go first, because they should not be the guinea pigs. They also stand to lose the most. Nor should they go last, because then they do not feel the benefits. I am not entirely sure if we are at that mid-point where they ought to be rolled out to vulnerable consumers. Industry, the Government and Ofgem—but industry in particular—need to have a real focus on giving vulnerable consumers that extra time and attention. There is a lot of work across the charitable sector, and with SEGB, on specific support and services to consumers during the installations. I think NEA did some work recently on deaf consumers, and SEGB has done some work on disabled consumers.

That is happening, but because of the roll-out and the issues that have been experienced it has possibly not been at the top of the list of things, if I am honest with you. We did some work a couple of years ago where we made a big information request of suppliers, asking questions around policy, intention and strategy in relation to how they treat vulnerable consumers through the installation. From that, we did a lot around best practice and how you share, because it is not a competitive area; we want the best for consumers. We have been able to do quite a lot with industry on sharing best practice. We plan to do a lot more of that.

Q47 **Anna Turley:** Thank you, that is great. Do you feel you have been listened to?

***Dhara Vyas:*** Yes, with industry, I feel we have. We have such a depth of experience in doing this across the retail market more generally. As the market has changed so much, it is really different for the new, emerging suppliers than it is for the bigger, more established suppliers. There is more of a job for us there in explaining the obligations in relation to vulnerable consumers, particularly around installation.

Q48 **Anna Turley:** From a supplier's perspective, do you think you are taking reasonable steps to support vulnerable customers?

***Audrey Gallacher:*** Yes. There are quite a lot of specific initiatives. We worked with the RNIB to create an accessible, in-home display for blind or partially sighted people. There are some specific examples, to try to ensure the technology can be used by everybody and they get the benefits of it. I have seen some really interesting case studies. Dhara spoke about prepayment meters. During the "beast from the east" last year one of our members could see everybody who was off supply and gave them an automatic £16 credit on the meter. They did not wait for them to phone them. It might have been an empty house, but they just did not want to take the chance that people would be off supply in that kind of weather. That is the kind of thing that you could never have done before.

There is also some really interesting stuff being done about health and social care, just at the pilot stages at the moment, but there is real potential here. We just need to make sure that consumers get the benefit of them and society can take advantage of this technology.

The other important thing is that there is a code of practice in place that sets out specifically that suppliers have to identify and log vulnerability. A best practice guide has been published by the Department; all our members have adopted it.

Q49 **Caroline Flint:** Ms Gallacher, around 30% of consumers are not being offered energy saving advice during installation. That is contrary to the code of practice Ofgem should be enforcing. Why are your members not providing that as just something that happens when they install smart meters?

***Audrey Gallacher:*** Not only are they required to do it; Dhara has also pointed out what an amazing opportunity this is to do it.

Q50 **Caroline Flint:** Why are they not doing it?

***Audrey Gallacher:*** There are different levels of performance. It is good and it is really important that this is being monitored. It is important that we are publicising these figures. There is a range of performance across different suppliers. Some suppliers are in excess of 90%.

Q51 **Caroline Flint:** I do not quite understand the answer. As I understand it, it is part of the code of practice that energy suppliers, whatever they are, should be providing this advice as a matter of course, but 30% of consumers are not getting it. Is this something you are taking up with your members, and do you feel that Ofgem should be enforcing the code more strongly?

***Audrey Gallacher:*** Yes, definitely. We have asked all our members if they have adopted the BEIS toolkit, which they said they have. There is no doubt that there is a range in performance, and some companies need to do better. If there is a role for the regulator to enforce against that, that is something that we would welcome as an industry. Consumers have to get the benefit of this. It is not good enough and it has to improve.

Q52 **Antoinette Sandbach:** Do you think there has been sufficient oversight of the programme? I will ask Citizens Advice.

***Dhara Vyas:*** Do I think there has been sufficient oversight of the programme? The NAO report clearly shone a spotlight on two of our big concerns to do with the programme, which were around the cost and the lack of recent information on costs and benefits, but also the deadline. It has been really timely, and it has been necessary. The programme itself has been going on for many years, and the market has changed. The world has changed since it began.

Q53 **Antoinette Sandbach:** Dhara, just so that those watching this session understand, it has cost every household £374. You are suggesting there is going to be another £17 on top, possibly more.

***Dhara Vyas:*** Yes.

Q54 **Antoinette Sandbach:** In 2016, the cost-benefit analysis was £11 billion worth of costs to bill payers, not to the companies, but to bill payers. We then hear that there are these gaps, so what do you think should be improved?

***Dhara Vyas:*** There should be a big focus on doing a new cost-benefit analysis, and more transparency around the emerging costs. For example, on the SMETS1 enrolment and adoption, there should be more transparency around what that will cost consumers and the impact of doing that within such a short timeframe. If the rebuttal is that, as long as you drag it out, you have two systems, what is the cost of that versus

the cost of doing it quickly? We do not have a good enough idea in order to play that watchdog role. It has been really timely, and it is really crucial, because as you say, ultimately, customers are all paying for this via bills.

To the point around whether all customers will feel the benefit in the same way, they will not, because some customers are already very energy efficient and very aware of what they are spending.

Q55 **Antoinette Sandbach:** Ms Gallacher, there is a recommendation that a senior official, or somebody with sufficient seniority, from the Treasury should sit on the boards of the companies rolling this out, where it is a publicly funded, i.e. consumer-funded, programme. How many of your members have invited a senior Treasury official to sit on their board in these types of programmes?

***Audrey Gallacher:*** I am not aware of any, but I can come back and check on that. There was a suggestion that the Treasury should be more directly involved in the smart meter implementation programme as well, the BEIS Government programme that industry and consumer organisations sit on. I think it would be a great idea for them to get involved in that.

Q56 **Antoinette Sandbach:** You have accepted that nearly a million meters have gone dumb, so that £374 per household that is paid for a meter that has gone dumb is wasted, is it not?

***Audrey Gallacher:*** One thing we need to recognise, which is linked to the cost-benefit analysis, is that right now we look at this as an average. It is £374, and there is still plenty of money left to support the overall positive impact of the business case.

Q57 **Antoinette Sandbach:** But we do not know that, do we, because there is not sufficient transparency?

***Audrey Gallacher:*** Exactly, you are dead right.

Q58 **Antoinette Sandbach:** Do you think the energy companies should be more transparent about the data that they hold and putting that into the public domain? You cannot even tell Mr Pawsey what benefits have been received by the cost savings to the energy companies.

***Audrey Gallacher:*** All the information we have provided to BEIS. Some of it might be commercially sensitive information that you could not or would not want to put in the public domain.

Q59 **Antoinette Sandbach:** Do you not accept that it is the consumer; it is me, the bill payer; it is my constituents; it is every single constituent of every MP around this table who is paying the bill, not you or your supplier companies? It is the consumer who is paying the bill, so why should commercial confidentiality attach to that data?

***Audrey Gallacher:*** The information is made available in the programme. Obviously there are costs outside that, direct supplier costs in procuring the meters and rolling them out. We have £1 billion a year going on the DCC, so there are significant costs across this whole programme. What is really important is that we understand what those are and start making decisions about the future of the programme based on individual social benefits, not the overall case.

Q60 **Antoinette Sandbach:** Can I clarify this? Are you saying that £1 billion cost for the DCC is being borne by the energy companies and is not passed on to the consumer?

***Audrey Gallacher:*** Ultimately, everything is passed on to the consumer.

Q61 **Antoinette Sandbach:** Right, so let us just clarify that, then. In terms of dual-band communications and the Alternative HAN solution, when are you expecting those to be widely rolled out? When are they going to be rolled out?

***Audrey Gallacher:*** I have the figures here. Right now, there is one dual-band comms hub. It is Q3 2019 but, again, that is still going through testing.

Q62 **Antoinette Sandbach:** But it was due to be 2018, was it not?

***Audrey Gallacher:*** Yes.

Q63 **Antoinette Sandbach:** So how confident are you, when you are sitting here in front of this Committee giving evidence, that that target is going to be hit?

***Audrey Gallacher:*** Right now, it is a plan. We have already acknowledged that the plan was an ambitious one, given the complexity and the technology.

Q64 **Antoinette Sandbach:** You have had six years, have you not?

***Audrey Gallacher:*** Yes, and clearly there have been delays. We have acknowledged that.

Q65 **Antoinette Sandbach:** What is the industry's plan to deal with the third of the SMETS1 meters that may not be rolled on to the new DCC?

***Audrey Gallacher:*** Right now, the Government's plan is that, if a meter is not enrolled, it has to be replaced by 2020. We have to have a think about this. If we end up replacing meters, there will be a cost to that and an impact on consumers, because it is another day off work. Obviously we hope that all the meters will be enrolled, but ultimately the policy decision here is that, if the meter is not enrolled, every meter has to be interoperable by the end of 2020, so it will be replaced. That will come at a cost.

**Stephen Kerr:** Who will pay?

Q66 **Antoinette Sandbach:** The consumer. If I phone up my energy supplier

and say, "You want to install a meter into my property", I appreciate most consumers will not know if it is SMETS1 or SMETS2, but if I asked the person at the end of the phone, "Is it a SMETS2 meter?", would your staff know?

***Audrey Gallacher:*** Yes. When they were booking appointments, they would know, because the engineer you would send out is one who would be trained up to do a SMETS2 installation. That should be apparent. Companies should know what they are rolling out. As you know, we are going through the transition at the moment, and the SMETS1 end date is scheduled for 15 March. That is going to be a massive challenge, because on 15 March there will not be any SMETS2 prepayment meters. We still have issues with rolling out SMETS2 meters across the whole of the northern network, so there is a big challenge on that transition, which goes back to the point about whether you want to incur additional costs by replacing meters in stranded assets.

Q67 **Antoinette Sandbach:** What liaison have you as energy companies had with Citizens Advice, councils and consumers, to say to them, "You can have a meter now that would need to be replaced or you can wait until Q3"—or whatever you said the date was—"and by delaying by a few months you will get a new, up-to-date meter"? Is the reality that you are not confident that any, or very many, SMETS2 meters are going to be delivered?

***Audrey Gallacher:*** There is a plan in place. We have not seen the DCC delivering at scale. There are only 250,000 of them out there, but there is a plan in place that this is the enduring solution. This is what everybody is working towards. There are 10,000 meter installers out there looking for a job to do, to install meters.

Q68 **Antoinette Sandbach:** Given that there has been a plan in place for six years that has not been adhered to, what would you say to us as MPs about how the appropriate oversight should be of your companies, if you cannot deliver to the promise that you have made around SMETS2?

***Audrey Gallacher:*** I do not think it is just energy companies. We are talking about a whole end-to-end system here, from meter manufacturers that make the things, energy companies that procure them, the back office in the energy companies that do that, right through to the central systems.

Q69 **Antoinette Sandbach:** Sorry, can I just stop you there? Are you saying in the last six years you have not learnt the lessons of the testing and the roll-out that has happened so far, and that at every stage of the process there is still a problem in all those areas that is going to potentially affect the SMETS2 roll-out? I am asking you for very specific advice to us about how the oversight is done. Looking at everybody, where have the lessons been learnt and where have they not been learnt? Where are you as a representative body focusing to make sure that the issues with the programme are addressed?

***Audrey Gallacher:*** There is a huge amount of work going on at the moment on testing, to ensure that the testing regime is as robust as it can be. There have been a huge amount of learnings from the SMETS1 roll-out, which has got us to where we are. There is also industry governance, the smart energy code, which looks to ensure that the whole system operates effectively. There are obligations on suppliers to roll these out; they will get fined up to 10% of their turnover if they do not do it, so there is already a process in place. What I would say for this Committee is that I will get additional information. We are happy to provide anything that we can provide. I want to reassure you that it is in everybody's interests—energy companies, customers, the Government—to work on this roll-out. I cannot stress enough how much effort has gone into it. I know it is tremendously frustrating. It is frustrating for us. It is frustrating for customers that there have been these delays, but please be assured that the industry is working incredibly hard to deliver this.

Q70 **Chair:** To finish, do you think that the 2020 deadline will be met? If not, do you think the Government should put in place a new timetable and reassess that deadline and that ambition? I will start with you, Dhara.

***Dhara Vyas:*** We do not. We think, if it is met, it will be at greater cost and inconvenience to consumers. There are varying degrees of complexity. For that reason, we should be valuing quality of installation, to get things like the energy efficiency messaging right. It is really important to slow down and focus on quality and cost.

***Audrey Gallacher:*** The NAO has said 70% to 75%. I would suggest the Committee might want to get the most up-to-date roll-out forecast, which will be submitted to Ofgem this month, to get a better understanding. Whatever we get by 2020 cannot be the end of it, because we need to complete the roll-out. That is why it is really important that we have a clear understanding of what that is going to look like and that we can do it in the most cost effective way.

Q71 **Chair:** You also think that there needs to be a reassessment of that deadline.

***Audrey Gallacher:*** Yes.

**Chair:** Thank you very much. Thank you both for coming to give evidence this morning. We will move straight on to the next session now. Thank you.

## Examination of Witnesses

Witnesses: Claire Perry MP, Daron Walker, Rob Salter-Church and Richard McCarthy.

Q72 **Chair:** Thank you very much, Minister and the other three witnesses, for

coming in to give evidence to us this morning. We have just heard from Citizens Advice and Energy UK. We are pleased to be taking evidence from you now. Perhaps for the record it would be good if you could introduce yourselves and say where you are from.

***Rob Salter-Church:*** I am Rob Salter-Church from Ofgem.

***Claire Perry:*** I am Claire Perry, Minister for Energy and Clean Growth.

***Daron Walker:*** I am Daron Walker, the SRO for the programme from BEIS.

***Richard McCarthy:*** I am Richard McCarthy, chairman of the Smart DCC.

Q73 **Chair:** Thank you very much. Can I start by asking the Minister how many smart meters have been rolled out so far?

***Claire Perry:*** The number as of today is 12.8 million. If I may just say a word of context, first of all, happy new year, and secondly we really welcome this investigation. Not only are we very keen to talk about the programme specifically, but the role of the programme and smart meters in delivering a digitised energy system is absolutely vital. For example, the announcement we made yesterday on the smart export guarantee, on which we would welcome scrutiny at some point, would not have been possible without the commitment to rolling out this programme. Not only is it a consumer-facing benefit; it is also a really important benefit for the whole energy system.

Q74 **Chair:** Energy UK and Citizens Advice both said that as well this morning, Minister. What fraction of the meters installed so far have been SMETS2 meters?

***Claire Perry:*** The current number of SMETS2 meters is 250,000 as of last week. Sorry, I do not have my calculator to do the percentages. I would just point out that, when I started answering PQs on this back in the summer, we were at 1,000 or 2,000. The ramp-up rate of that programme is absolutely phenomenal. I believe the installation rate is now around 4,000 meters a day.

Q75 **Chair:** What fraction of the total roll-out does this constitute so far? Where are we against everyone getting a smart meter?

***Claire Perry:*** You will know, Chair, that the original commitment was to offer every household a smart meter by the end of 2020. We are currently at 25%. The number is a little higher in the prepayment meter category, but in general around a quarter of all households have now had an installation.

Q76 **Chair:** I know that there have been some particular issues around SMETS2 meters in the north of England and Scotland. How many of those 250,000 SMETS2 meters have been installed in the DCC north region?

***Claire Perry:*** Far too few. The current number is 10,000, which is about 4% of the total number of SMETS meters. If it is appropriate, I would like

to invite Richard to explain why that is. I feel particularly strongly that, given a third of households are in the north, we must see a normalisation of the installation rates as soon as possible. I have been assured by the team that we should be at a like-for-like installation rate by the beginning of Q3. Perhaps I can invite Richard to talk about why we are lagging behind unacceptably in the north.

Q77 **Chair:** We will come on to those issues later. I am keen to get some of the numbers done first, if that is okay. We will come back to that issue, though, Richard. The roll-out slowed down in 2018, Minister. Why was that?

***Claire Perry:*** It was because we always knew that we would have this transitional period. There were two things going on. One was that I believe a lot of the low-hanging fruit got done first, and a lot of the very energy-enabled consumers were the ones who actually requested the smart meters. Of course, there was this transitional period from SMETS1 to SMETS2, with lots of concern, rightly, about interoperability issues. Essentially it became harder to install those meters, but I have been pleased to see acceleration, particularly in the SMETS2 meters, which is where we want the programme to go. There has been very substantial acceleration in the last couple of months.

Q78 **Chair:** I know there is some specific work being done across the industry, called Alt HAN, on some of the hardest to install properties: ones with thick walls, meters outside or in high-rise flats. How close are we to being able to install meters in those sorts of properties, Minister?

***Claire Perry:*** I am happy to answer the question. Daron is my expert as the SRO on this, but I believe we will have a full solution by the end of 2019. It is a particular issue both in rural areas and, as you say, Chair, in high-rise areas. It is also where you have separation of gas and electricity meters. Those households could install today a meter that would just deal with the electricity element of the bill, but not the dual-fuel element of the bill. Again, I think it is absolutely right that we have this industry group with strong governance, and we need to fix that patch at the latest by the end of this year.

**Chair:** We will move on in more detail to those in due course.

Q79 **Anna Turley:** I would like to talk fairly specifically about the issue of half-hourly settlement. One of the biggest selling points about smart meters was to enable people to prevent waste and use energy at cheaper times, when it is off-peak. Ofgem consulted on this issue back in 2012, and it was predicted that, of the £900 million that would be saved by smart meters between 2018 and 2022, £200 million would be as a result of half-hourly settlement and people's ability to switch. It seems that we are not going to be in a situation to use half-hourly settlement across the market until 2022, which is the point after which that £200 million is supposed to have been saved. Why is it still not ready? I will start with the Minister.

***Claire Perry:*** I agree that half-hourly settlement is a really important part of unlocking this smart energy system. Some suppliers are offering it already. Perhaps I could invite Rob from Ofgem to answer this specific question.

***Rob Salter-Church:*** It is probably worth explaining the approach that we have taken to moving to market-wide half-hourly settlement. The first step that we took, and we implemented these reforms a couple of years ago, was to introduce cost-effective half-hourly settlement on an elective basis for domestic properties. Previously, the half-hourly settlement regime was designed for the very largest industrial consumer, and it was very expensive so suppliers would not offer it to domestic customers. We have already introduced reforms that will enable those suppliers, as the Minister said, to offer more interesting tariffs, in particular around EV charging. We are already seeing some suppliers offering those on the basis of half-hourly settlement. Having delivered that important enabler, we are looking at market-wide half-hourly settlement. We are expecting to make our decision about how to move to market-wide half-hourly settlement at the end of this year.

You are right to have identified that there are some benefits that might occur now in relation to time-of-use tariffs, but half-hourly settlement is really about the long-term future for the energy system and creating a smarter, more flexible system. With the Government, we commissioned a report from UCL looking at the potential benefits. Out to 2050, you have some £50 billion of efficiency savings from having a more flexible system. Smart meters and half-hourly settlement are key enablers to achieve that over the long term, and we are confident that the reforms we are putting in place, alongside the work we are doing to support smart metering, will enable those long term benefits to be made for customers.

Q80 **Anna Turley:** I will come back to the Minister. Having heard that explanation, are you not worried that this blows a big hole in the savings predicted from this key flagship Government policy?

***Claire Perry:*** It is definitely a concern. As Rob said, we have started with the customers for whom the cost is less prohibitive. There are domestic suppliers who are prepared to offer this. It was interesting in the NAO report that this was acknowledged but not seen as a major risk to the benefits. I suppose one of the things I have realised—you learn a lot from being Minister—is that, when you think about this, you think of it just as a consumer-facing project. Actually, there are benefits to the whole energy system. We will have the most digitised energy system in the world when we have completed this roll-out. We just need to ensure we are advancing on all fronts, including half-hourly settlements. I know suppliers are pushing, in the most innovative cases, to deliver the settlement, because they see the benefits for their consumers and, frankly, their own tariffs.

Q81 **Antoinette Sandbach:** Do you accept the conclusions of the most recent NAO report?

***Claire Perry:*** It is an excellent report. I accept almost all the conclusions.

Q82 **Antoinette Sandbach:** On page 18 to 19 of the NAO report, there are a number of recommendations from A to F for BEIS, and then some for Ofgem.

***Claire Perry:*** Yes.

**Antoinette Sandbach:** It might be quicker to deal with Ofgem first. Do you accept the recommendations, Ofgem?

***Rob Salter-Church:*** Yes. It is a fair report. We accept the recommendations and we will act on them.

Q83 **Antoinette Sandbach:** When?

***Rob Salter-Church:*** We are already acting on those recommendations. For example, we are already holding suppliers to account for the work they are doing to provide energy efficiency advice, and we are working with the CMA on its review of the prepayment meter cap to feed in the information we have on how SMETS1 meters are affecting switching.

Q84 **Antoinette Sandbach:** What about the transparency of DCC costs?

***Rob Salter-Church:*** Again, we continue to drive DCC to be as transparent as possible. We have made some changes already to the way we run the price control that governs DCC's costs, to make it more transparent and easier for suppliers and DCC's customers to engage in that process. We will continue to do more and drive DCC to be more transparent.

Q85 **Antoinette Sandbach:** Minister, there were recommendations A to F. You said you substantially accept all of them.

***Claire Perry:*** I am taking action in all the areas. Indeed, we have specifically brought forward action on what I thought was a superb recommendation, around trying to improve consumer engagement post meter installation. We launched an innovation competition for that at the beginning of the year, totalling £6.2 million. I am taking action in all the areas. It is an excellent report. My only minor quibble was that one of the challenges is around the impact on switching. The data we have suggests that those who have a smart meter are more likely to switch than not. I think it is partly because they may be in that vanguard of customers.

Q86 **Antoinette Sandbach:** Given that their meter may go dumb when they switch, can I ask whether you have requested an economic analysis of the effects of the extension? An extension was made of one year for smart meter roll-out. Secondly, have you looked at the risks that have been highlighted in the NAO report, which indicates that there are risks to consumers in terms of price and delivery? We have seen it in the north.

***Claire Perry:*** Potentially, there are risks.

Q87 **Antoinette Sandbach:** Did you commission the report, either you or your predecessors?

***Daron Walker:*** Is it possible to clarify the specific question, so I can make sure I get it right?

Q88 **Antoinette Sandbach:** Yes. Did either the Minister or predecessor Ministers specifically commission an economic analysis of the effects of the extension of the smart meter roll-out by a year?

***Daron Walker:*** Let me see if I can answer that. You are asking whether the idea of allowing SMETS1 meters to carry on being rolled out was a sensible idea economically.

**Antoinette Sandbach:** Yes. Sorry, I have asked a very specific question.

***Daron Walker:*** We did not commission a specific analysis, but we did some qualitative studies of whether extending the roll-out, because SMETS2 was not quite ready, was better than not extending it for SMETS1. You had thousands of installers and all of that cost; if they were sitting idle, all those costs would be passed on to the consumer.

***Claire Perry:*** The answer is no. There was no specific economic analysis commissioned. There were detailed conversations, and we have had these conversations. We have had derogation extensions of the SMETS1 installation deadline to March 15. The trade-off is whether you want customers to achieve some form of saving now by having a SMETS1 installation. I personally chaired a consumer-facing round table.

Q89 **Antoinette Sandbach:** Sorry to interrupt you, but can I clarify this? The detailed analysis was done in 2016. We are now in 2019. There has been a substantial change in the landscape, and a far greater roll-out of SMETS1 meters than would have been anticipated in 2016. What analysis of the risks to the programme, and in effect the cost to the consumer, has been made by the Department in the light of that changed landscape? Consumer engagement is very important, but in reality is the programme going to deliver the benefits it is supposed to?

***Claire Perry:*** One of the things we have committed to is to review those consumer benefits this year, which I believe was a suggestion in the NAO report. It came up with updated cost numbers, up 4% on the total programme cost, but as you rightly point out the last time the benefits were assessed was in 2016. I take your point entirely about the risks. There is also evidence from the installation, particularly from some large suppliers, that consumers are saving more on their tariffs, twice as much in some cases as was originally forecast. It is really important that we do that benefit analysis this year. We have committed to do so, and we will obviously make those results public.

Q90 **Chair:** On recommendation A, the issue about updating the cost-benefit analysis, you are going to update it this year. Can you be a little more specific, Minister, about when this year that will be updated?

***Claire Perry:*** Daron is writing "the summer", but as we know the summer can be long. Do we have a specific target date?

***Daron Walker:*** We are aiming for July.

***Claire Perry:*** It is July this year, so the start of Q3.

Q91 **Chair:** Thank you. That is very helpful. Also in recommendation A, the NAO has said to assess the value for money of leaving the 2020 deadline in place compared with adopting a new deadline. As part of the cost-benefit analysis, will you also be reassessing that 2020 deadline?

***Claire Perry:*** Yes, and it is linked to the second recommendation, which is that we should clarify what our post-2020 landscape looks like. On their own analysis, we cannot mandate installation. They are assuming we will get to 75% installation by the end of 2020.

Q92 **Chair:** Even though we are only at 25% now.

***Claire Perry:*** That is right. We agree; it is amazing, the roll-out. We are at 12.8 million meters now, and we see that roll-out accelerating. But it is absolutely right that we think about what the 2020 landscape is, and think about it now. We do not want to mandate this. One of the things we get lots of letters about is where Mrs So-and-so tells me she is being forced to have a smart meter. That is not true. It is going to be interesting, because suppliers are increasingly bringing forward tariffs and benefits linked to smart meters.

Q93 **Chair:** The rate of installation would have to go up 20-fold compared with what it is now to get to just 75% next year.

***Claire Perry:*** I am assured that that is achievable. If I might ask Daron and perhaps Ofgem to comment, those are the ones reviewing the weekly numbers.

***Daron Walker:*** The last forecast that the energy suppliers put forward, which was about a year ago, said between 70% and 75% by the end of 2020. The roll-out would not need to double; it would be something like a 40% to 50% increase, because we are doing a million and a bit per quarter. We would need to get up to 6 million or 7 million a year to start tracking up towards the 70% to 75%. The data of 12.8 million is from September so we have another quarter of data to add in. It is certainly challenging, but it is not out of the question that we can get to those levels.

Q94 **Chair:** How many per quarter are going in at the moment?

***Daron Walker:*** Just over a million and a quarter, so that is around 4 million to 5 million a year. It is about 1.2 million each quarter, at the moment. You need to get up to 8 million or 9 million per year.

***Claire Perry:*** You need to double it, or just over.

Q95 **Chair:** It is a bit more than that. If you are at 25% now at 12.8 million, that means you need to get another 25 million in.

***Daron Walker:*** We have another quarter of data. We have all the smaller suppliers, which we only add in at the end of each year. We also have the fact that a lot of suppliers have been waiting for SMETS2 before they really scale up. You are right to say that it is a challenge.

Q96 **Chair:** That is just to get to 75%.

***Daron Walker:*** Yes.

***Claire Perry:*** I have not made a public announcement but I think I should share this with the Committee. I am looking closely at whether to implement the New and Replacement Obligation soon and bring forward a consultation, because I believe that is particularly important, especially in new buildings, to make sure that this is effectively baked into the infrastructure of our housing stock. We will do whatever we can, in the Department and with the team, to do what we need to do with the powers we have.

It is interesting to go back to the consumer point. This is not a technical proposition; it is a foot-in-the-door proposition. It is basically persuading somebody they want one, and then making sure they are there to do the installation. There are some suppliers who are very good at this and others who are not good. We have been working very closely with other organisations, such as broadband providers, to teach them how to do this. What happens if you have a missed appointment? How do you avoid having missed appointments to ensure what we are not wasting suppliers' and consumers' time? There is nothing more annoying than failed installations, so there is a lot of work going on. Of course, we are looking at whatever other recommendations we need to ensure we meet those targets.

Q97 **Chair:** You may or may not have seen the evidence we have already had this morning, but both Energy UK and Citizens Advice said that that 2020 target would not be met and that it should be reassessed, not least because, if we want to get the benefits for consumers, which we all want to achieve, actually getting it right is just so important. If we try to rush it we will not actually achieve the benefits. I hope, Minister, when you come back in the summer to look at the cost-benefit analysis and the timetable, you take on board those views.

Can I ask about the recommendations to Ofgem, recommendation C, Mr Salter-Church? It says to "ensure, by March 2019, that no energy suppliers are falling materially short of their obligation to provide advice on energy efficiency". This is something that Members of this Committee are very concerned about: that 30% of people who are having meters installed are not being given advice, even though that is in their obligations. What penalties have you put so far already on those energy suppliers for not meeting, one time out of three, those obligations that they have already committed to? What penalties have already been put in

place?

***Rob Salter-Church:*** The Committee is right to focus on energy efficiency as an important part of the roll-out. So far we have not taken any enforcement action against suppliers.

Q98 **Chair:** Even though the National Audit Office and Citizens Advice this morning have said to us that, one time out of three when meters are installed, that energy advice, which is an obligation they are given, is not being met today—you know that and we know that—you have not put in place any penalties.

***Rob Salter-Church:*** We have a range of actions that we can take.

Q99 **Chair:** Which ones have you taken?

***Rob Salter-Church:*** We have taken a range of compliance actions with suppliers. For example, we stepped in with one supplier.

Q100 **Chair:** What supplier was that?

***Rob Salter-Church:*** I can write to the Committee to confirm the name of the supplier. We have taken action with a number of them. I can explain how we have gone about addressing this issue, because it is an important one. Suppliers are required to undertake a quarterly survey of their customers who have had smart meters installed, to assess the quality. Part of that survey is about whether the customer recalls having energy efficiency advice, and that is the stat I think you are referring to from the NAO. This particularly supplier had a recall rate of around 63%, which is absolutely not good enough. We stepped in with that supplier, used the threat of enforcement action to challenge it to make improvements and to put in place a remediation plan. We closely monitored what it did, and as a result of our actions with it that increased within a quarter to 83%.

Now, as the metric is about recall, you are never going to get to 100% of customers recalling that, in part because customers could refuse the offer of energy efficiency advice, but also with recall it is not always going to be 100% remembered. The best supplier is at about 89% recall. That is really positive. We can see that, when we have taken action using our compliance tools, the threat of enforcement has had a quick impact.

Q101 **Chair:** You agree, Mr Salter-Church, that this is really important.

***Rob Salter-Church:*** It is really important, and I do not rule out taking enforcement action in the future if suppliers do not improve.

Q102 **Chair:** Who got 89%?

***Rob Salter-Church:*** Again, I can write to the Committee with more information.

Q103 **Chair:** It is just that you are saying this is really important, and you are giving evidence to a Select Committee on it today. We agree it is really

important, Mr Salter-Church, and if I think something is important I try to remember it and have it at my fingertips. You cannot tell us who the best and worst are today. A supplier got 63%, so four times out of 10 when it went to visit a customer it did not give them the advice that it is obliged to do. It is not just a "nice to have"; suppliers are obliged to do it. They have made that commitment. You are the regulator, and here we are again with Ofgem, and Ofgem is not using the powers that it has.

***Rob Salter-Church:*** I would contest that. We have used the powers that we have. We have a large range of powers.

Q104 **Chair:** No, sorry, Mr Salter-Church. Almost four out of 10 customers, 37%, of one supplier, whose name you cannot remember even though it is really important, did not get something that the supplier had committed to give. You did not use the powers you have to fine and reprimand that supplier. I do not think that is good enough, Mr Salter-Church. I would say to you and Ofgem that you are given important powers by the Secretary of State and by Parliament. We would ask you to use those powers, because the whole point of rolling out smart meters is to get benefits to customers. They will not get those benefits if they are not given the advice. We will say to Ofgem, as we have before, that you were given powers by Parliament. Use them. Is that understood?

***Rob Salter-Church:*** That is understood. If I may explain, we have a range of different powers, as well as enforcement. We think carefully about the right approach to take that will get the quickest and best outcome for consumers. That is what we have done. If you look more broadly at the evidence, it shows that customers are achieving some of the savings, changing their behaviour and adopting energy efficiency steps. According to a Smart Energy GB survey, 81% of customers who have had a smart meter installed have taken at least one step to help save energy. Yes, this is a serious issue. We treat it very seriously, and we will take action if suppliers do not improve.

Q105 **Chair:** I have one more thing before I come to you, Minister, because I do want to hear from you. When we previously took evidence on the energy price cap from Ofgem, Dermot Nolan apologised to this Committee for not in the past protecting vulnerable customers in the way that they should have done. We are again talking about vulnerable customers today, who most need advice with energy efficiency so they are not paying more than they should for their energy. I do not want you or Dermot Nolan to have to come back to us again in the future and say, "I am sorry. We should have acted sooner but we did not". Yet here we are again, when you have powers given to you by Parliament, and by the Secretary of State and the Minister who is here today, and you are not using them. Frankly, we would like to see our regulators use the powers that they have, to enforce this against the powerful on behalf of the vulnerable. That is what we urge and ask you to do, because that is your job. I will come now to the Minister.

***Claire Perry:*** Thank you, Chair. I will make sure this is added to my agenda for my monthly meetings with the Ofgem heads, chair and CEO.

**Chair:** Thank you, Minister.

***Claire Perry:*** I just wanted, if it is helpful, to share my own personal experience, because not only is the one-off energy savings advice really important, but so is the continual education as to what you might do. I believe what happens is that people will take one action when they first get it, because it is all very interesting and new. In my case, I found I had an old fridge that was really energy inefficient, so I switched it off. The meter sits and blinks at you in your kitchen and you think that is very interesting.

We need ongoing reminders as to what you can do to continue to save energy, and all the good stuff that suppliers do. "So-and-so down the street has the same output as you and is saving more money". That is part of the future of this. This becomes a mechanism to encourage people to save energy going forward in their homes, rather than just the one-off because it is quite exciting if you switch your lights off to see how much you save. That was the reason that we really welcomed the suggestion for further innovation, and I was happy to launch the competition. It is really important that this is a fundamental part of the relationship we want suppliers to have with their customers. It is not a "nice to have".

Q106 **Chair:** No, and it is not just about making it easier for suppliers to get energy readings. It is about delivering benefits for the consumer and for the environment.

***Claire Perry:*** Absolutely.

Q107 **Stephen Kerr:** You are clearly behind schedule, and one of the reasons we were given in the previous session this morning was the technical complexity. I am looking at Richard, because I want to understand what drove the thinking that we would have a smart meter roll-out more complex and technologically ambitious than anything else in the European Union, and do it in the same timespan that our European Union partners were doing something less complex and much simpler. What was our thinking to come up with such a plan?

***Richard McCarthy:*** To be perfectly honest with you, we are the deliverer of a Government policy.

Q108 **Stephen Kerr:** All right, I will come back to the Minister.

***Claire Perry:*** We are not going to pass the buck. This has been running now over several Governments, and the original plan, which was set out in 2009, was ambitious, to be clear. We have seen slippage in deadlines as a result of that. We have also seen, quite rightly, a realisation that you cannot just have an uncontrollable race to develop a meter. One of the challenges is always to ask why we stuck with SMETS1. The reason is

that we wanted to consolidate everybody into a single standard that could then be seamlessly switched into an interoperable system.

Q109 **Stephen Kerr:** Was it technically possible to do what the ambition was in 2009 in any timescale? Did the technology exist?

***Claire Perry:*** Could I ask Daron? By the way, he is the civil servant who has stuck with a major programme longer than almost any other Department, so I am pleased that we have him on the team.

***Daron Walker:*** It is a really important question. One of the challenges we had with this, which I think the Chair has already indicated, is how we make sure suppliers are doing the right thing for consumers. One of the reasons we set an ambitious deadline was to make sure that energy suppliers were driven to make the investment.

Q110 **Stephen Kerr:** It is not about the deadline, but the whole technological aspect of the project. That is the reason that comes up time and time again to justify the delay. "We are delayed on this because of technology". The technology does not even exist to fulfil the mandate that the Government laid before the industry. Why did we go down this road in the first place?

***Daron Walker:*** We went down this road because we wanted to be ambitious. We wanted consumers to benefit as soon as possible. If we had set a later deadline, more consumers would have waited for longer.

Q111 **Stephen Kerr:** Was it properly flagged from the beginning that this technology did not exist or it was not tested?

***Daron Walker:*** It was flagged that we would need to introduce various technologies in stages over time. The core solution that the DCC has built is good for 70% of households. This year it will roll that out to 95% of households. The Chair mentioned Alt HAN, which is for the last 5%. There was a staged approach, and it was all driven to bring benefits to consumers as soon as possible.

Q112 **Stephen Kerr:** Was the risk acknowledged at the beginning?

***Daron Walker:*** The risk was acknowledged, yes.

Q113 **Stephen Kerr:** Why are we so intransigent about 2020, then?

***Daron Walker:*** My answer to the 2020 thing—

Q114 **Stephen Kerr:** It is clear we are nowhere near achieving it.

***Daron Walker:*** We are trying to drive industry change. Some of the parties are willing to do the right thing and bring forward—

Q115 **Stephen Kerr:** So this is all about constructive tension with the suppliers.

***Daron Walker:*** It is about driving them to do the right thing for consumers, which is why the programme exists in the first place.

Q116 **Stephen Kerr:** It is a Government policy objective, is it not? You are using a Government policy objective as a means to create constructive tension with suppliers. It seems a very strange approach.

***Claire Perry:*** It is a little like the broadband roll-out, which is a similarly ambitious programme.

**Stephen Kerr:** It has not gone that well.

***Claire Perry:*** We started off with a solution and an ambition. We then changed the technical solution; we realised that other technical solutions were emerging that could accelerate this. The original SMETS1 technology, as I understand it, is not particularly complicated; it is a meter that talks over a mobile system. It is not sending someone to the moon. The SMETS2 system is more complicated because it is a bespoke system to provide interoperability across the whole UK[1], which is a more technical system and was slower to deploy than we wanted. We want that to be robust before it rolls out. It is now rolling out and it is robust.

Since the programme started, which was originally, quite rightly, set up as a cost-saving, carbon-reducing, consumer-facing programme, the systems benefits from this have become even more compelling. That is why there is an absolute determination to roll this out and to roll this out properly. On this backbone, we can deliver things such as smart export guarantee.

Q117 **Stephen Kerr:** Minister, we are all signed up to the idea. It is always about the how, is it not? Let us talk about the how.

***Richard McCarthy:*** I will answer this question.

**Stephen Kerr:** How many meters are now connected to the Smart DCC?

***Richard McCarthy:*** The Minister advised you that as of Friday last week we hit 250,000 SMETS2 meters. I can tell you today we are now at over 260,000. Yesterday, yet again, we broke a new record, with 5,000 installs in one day. If you look at the rate of installation growth, which is critical, accepting that we start from a low base, in the last full month of our figures, which would be November last year, the overall growth in SMETS2 installations for that month from the previous month was 76%. That is not an unusual figure.

Q118 **Stephen Kerr:** But this is small beer against what has to be done between now and the end of 2020.

***Richard McCarthy:*** I understand that challenge, and that has been answered already.

Q119 **Stephen Kerr:** How confident are you, then, about the achievement of it?

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[1] Note by witness: Should be "Great Britain not "UK".

***Richard McCarthy:*** What I can give you is the confidence of our system to support the large numbers. That is our job. Our job is to provide you with a network that works, and that is capable of handling scale. We have had this independently tested. We are equipped to manage 280,000 installs a week. We are ready to manage the numbers.

Q120 **Stephen Kerr:** You have the capacity. Let me ask you about the SMETS1 meter. Will all those SMETS1 meters in the country, all 11 million-plus of them, be enrolled and adopted into the DCC?

***Richard McCarthy:*** What I am going to tell you is that today we have great confidence in the programme.

**Stephen Kerr:** I love how you begin your answers with "what I am going to tell you".

***Richard McCarthy:*** I want to be very honest and clear with you. The programme that is planned to be implemented from December last year through to the end of 2020 has four elements to it. The first element is the development of what is called a dual-control organisation, which ensures that we align the SMETS1 meters with the security provisions we have built into SMETS2. That is very important for our consumers.

Then there are three cohorts, as identified in the NAO report. All the terms are agreed for cohort 1. We expect to see the first migration start in quarter 2. We have now agreed commercial terms with Secure, which is in cohort 2, identified within the NAO report as a risk. The matter is now with lawyers, to simply tie up the paperwork. We expect the second cohort to then be released in quarter 3, and the last cohort to be released in quarter 4. We have a very clear plan.

Q121 **Stephen Kerr:** The answer to my question is yes.

***Richard McCarthy:*** We have confidence, yes. If you remember, the report talks about a tolerance rate of 2% potentially not being able to be adopted. We have no reason to change that assumption at this point.

Q122 **Stephen Kerr:** The red flag was that up to a third of the SMETS1 meters could not be adopted.

***Richard McCarthy:*** At the time of the NAO report, we had not been able to demonstrate to anybody, as we did at the end of November last year, that the proof of concept actually worked. We had Daron in our office with others who saw a SMETS1 meter move over to the DCC network, and the message has been successfully sent.

Q123 **Stephen Kerr:** Within the margin of error, the deadline for completion of the SMETS1 adoptions is—

***Richard McCarthy:*** The end of 2020.

***Claire Perry:*** One of the prioritisation factors within each cohort is meters that have gone dumb. We believe those who have switched and

lost their functionality should be a priority for enrolment into the DCC network, so they regain that functionality as quickly as possible.

Q124 **Stephen Kerr:** How will consumers learn of this? How will they know?

***Claire Perry:*** That is an interesting question, and that is something we need to examine.

***Daron Walker:*** First, once things have gone live, suppliers will need to inform their customers of when their service has gone back smart. That is one of the things we will need to work with suppliers on, to make sure they are communicating properly about that.

***Richard McCarthy:*** I believe we have proved the concept. I would encourage suppliers to gear up for early migration, and the Committee endorsing that would be very helpful.

Q125 **Stephen Kerr:** That is a very clear commitment that you are giving. What about the functionality of the SMETS1 meter?

***Richard McCarthy:*** The key thing is that, first of all, the functionality that exists now is retained.

Q126 **Stephen Kerr:** The same as SMETS2?

***Richard McCarthy:*** No, the functionality that is built into the individual SMETS1 meters. The second thing is that the interoperability functionality is switched on immediately. That is the most critical thing. There are network benefits that will come as well, which include what is sometimes called the last gasp messaging. If there is a long-term or serious outage of power, at the moment network operators have to rely on people ringing them unless there is a smart meter telling them that there has been an outage. That is one of the benefits of the SMETS2 programme. In the future, we will have the ability to update functionality from within DCC.

Q127 **Stephen Kerr:** With the SMETS1?

***Richard McCarthy:*** With the SMETS1.

Q128 **Stephen Kerr:** Will the SMETS1 functionality match the SMETS2 functionality?

***Richard McCarthy:*** I understand that it will not in all elements beyond what I have just told you, but it will match the key functionality element of interoperability.

Q129 **Stephen Kerr:** How much of an obstacle will the 11 million SMETS1 meters, with their limited functionality, be to the achievement of the smart home, smart grid, smart energy system that the Minister quite rightly enthuses over?

***Richard McCarthy:*** It is relatively minimal, actually. The key thing is that people will have benefits. People have designed SMETS1 meters in

slightly different ways, allowing them to communicate with different devices. People out there have innovated in ways to enable that to happen.

Q130 **Stephen Kerr:** So you can see no obstacle to the SMETS1 meters that are currently out there being used for the full functionality of the SMETS2, whether it is EVs or whatever is going to be used.

***Richard McCarthy:*** There are no serious obstacles. I made the point that it is absolutely fundamentally focused on the key points of functionality. I would have to go through every combination to tell you what may not be available.

Q131 **Stephen Kerr:** But the advantage of the smart meter for the consumer, as we have discussed earlier—

***Richard McCarthy:*** It is secured.

Q132 **Stephen Kerr:** Yes, but the problem is that, if it is limited in its functionality, the reality is at some point within the expected lifetime of the SMETS1 meters we are going to have to replace them all with SMETS2 meters.

**Chair:** We are going to have to move on in a second.

***Daron Walker:*** The key functions that you need for peak load control, load shifting and time of use tariffs are all available in SMETS1.

***Claire Perry:*** All will be preserved.

***Daron Walker:*** Once it is enrolled and then made interoperable, the things you need to support the smart system are all there in the SMETS1 meters.

Q133 **Stephen Kerr:** SMETS2 meters currently have no functionality around prepayment.

***Richard McCarthy:*** We have prepayment meters on the wall that are all working.

Q134 **Chair:** So that is not true.

***Richard McCarthy:*** That is now not true. They are small numbers, but they all work and all successfully send messages over the system.

***Claire Perry:*** If it is helpful, SMETS1 smart meters for prepayment customers are really valuable. If you look at the data, they make topping up much easier.

**Chair:** Yes, we agree with all that.

***Claire Perry:*** My understanding was that we follow the functionality process, build a robust meter, and then build a robust prepayment framework on top, which we have done with SMETS2. I am particularly

keen that we make sure these enrolments happen but they are robust, because the loss of functionality needs to stop.

Q135 **Mark Pawsey:** I have a quick question for Daron and Richard. Given that we have been told that SMETS1 upgraded has the same functionality as SMETS2, why have we told suppliers, which I understand have stocks of SMETS1 meters, that they are not allowed to install them after the end of March this year?

***Daron Walker:*** The straightforward answer to that is the interoperability issue with SMETS1. Until they are enrolled they will not ensure that when you switch you keep your smart service. That is one thing. The other thing is that SMETS2 meters with DCC are going to be lower cost.

Q136 **Mark Pawsey:** I accept that SMETS2 is better.

***Daron Walker:*** And cheaper.

Q137 **Mark Pawsey:** If I were installing one I would prefer SMETS2 but, if manufacturers have substantial stocks of SMETS1 that, upgradeable, have the same operability, why are we saying to them they effectively have to write them off? What is the cost, and who is bearing that cost?

***Daron Walker:*** We have basically flagged the dates for these things. We have moved them to take account of the fact that SMETS2 was not quite ready and SMETS1 was still rolling out. We have given them plenty of warning so they can manage their stocks. We also gave derogations to some suppliers that were really actively pursuing SMETS2, but fundamentally if we do not set a date and force them over it is quite comfortable for them to carry on rolling SMETS1 meters out.

Q138 **Mark Pawsey:** You are satisfied that we will not be throwing away massive quantities of perfectly operable SMETS1 meters.

***Daron Walker:*** We will not.

***Claire Perry:*** It is hugely important, because one of the key challenges for SMETS1 installations in constituencies like mine is that, if you do not have a good mobile signal, it ain't working. It is really important that we stop installing where you cannot actually get the functionality, even if you can hook it up. Secondly, because most of the supply chain as I understand it is leased, not owned, there is essentially an important manufacturing base sitting behind this. As Daron said, there has been plenty of signalling. I have signed off on derogations to try to smooth this, but in my view the industry has had plenty of warning. We now have a robust communications network that is working and is testable, and we need to crack on with SMETS2, because it just avoids complexity going forward.

Q139 **Caroline Flint:** One of the objectives of the programme was to create the environment for a smart energy system, which included being better able to balance the grid as electricity consumption grows, with electric cars and everything else. Could you clarify for me on the functionality

whether the SMETS1 meters will be able to provide that aspect of balancing the grid? You have talked about some of the things they will be able to do through upgrades, but will they be able to contribute to that? You have escalated the installation of SMETS1, but that has a knock-on effect on its contribution to that objective. Could you clarify that for me, please?

***Daron Walker:*** The main mechanism for allowing this to help with the system balancing is the ability to shift load away from peak moments and to control loads, so both of those functionalities. The ability to price electricity at different prices for different times of day is available on SMETS1, as well as the ability to control load in the household through signals from prices. The SMETS1 can do that. Both of those factors are able and capable with SMETS1 meters.

Q140 **Vernon Coaker:** To Richard to start with, looking specifically at the 2016 BEIS cost-benefit analysis, which the NAO have referred to on page 42 of its report, for a while we are going to have a highly mixed SMETS1 and SMETS2 network. There are assumptions that that will deliver, which are included in the big savings in operating costs to the suppliers. Is that all still accurate? Has that happened, or is it happening?

***Richard McCarthy:*** All I can say is that we provide a service, and we provide data and cost data to the Department, which has to sign off each time we want to develop our programmes, and Ofgem has to approve those numbers. I can tell you that, in the SMETS1 programme, for example, we have now secured in-life savings. We are making it cheaper for energy companies to run those SMETS1 meters when they are enrolled and adopted on our new system.

Q141 **Vernon Coaker:** So the operating cost savings are identified. Maybe other members of the panel want to tell us, but has that therefore resulted in lower energy bills? As it stands at the moment under this cost-benefit analysis the net impact on households is that they have been levied to introduce this. Everybody is paying more, according to the comms. This year, if this is accurate, will be the first year it goes down. Is that going to happen, or has it gone down before?

***Daron Walker:*** The companies obviously need to invest in their systems. They need to invest in the cost of the DCC and establishing that system. There are some upfront investment costs, which is why there are some net costs.

Q142 **Vernon Coaker:** Yes, I understand that.

***Daron Walker:*** As the proportion of smart meters grows in the system, more and more of the savings emerge. The chart that you are looking at in the NAO report is effectively a proxy for how many people have smart meters, and the more people with smart meters, the more people who are saving.

Q143 **Vernon Coaker:** What I am asking, though, Daron, is whether the

information from the smart meters that goes back to the suppliers is now working to the extent that it is reducing their costs, which is therefore going to result in lower energy bills? This year is the first year. I have to say, until I read this, I was not aware that I am being levied to introduce this. Everybody is paying. It must be god knows how much; I should know, but I do not know. It is billions of pounds.

**Chair:** It is £374.

**Vernon Coaker:** Yes, so a lot of money. This year, everybody should be joyous, because for millions of people it is the first year in which they are going to start seeing savings. Is that accurate?

***Daron Walker:*** There are lots of questions in what you have said. First, that is an average saving.

Q144 **Vernon Coaker:** Some people are going to save loads, and some people are still going to pay.

***Daron Walker:*** People who have a smart meter will start saving straight away. People who are waiting for their smart meter will not get some of their savings until they get a smart meter. The good thing about having a smart meter is that you can start saving straight away from the information you are getting.

Q145 **Vernon Coaker:** Nobody has saved yet, according to this. It is an average; I get that.

***Daron Walker:*** It is an average. That is the first thing. Secondly, that is based on the 2016 CBA, so when we update it later on this year we will need to update the chart you see in front of you.

Q146 **Vernon Coaker:** The problem, as Caroline Flint and others have said, is that you can only operate on the evidence. We think it is better and our report is going to come out and show it, but at the moment we have no evidence for this.

***Daron Walker:*** We have strong evidence that consumers who have a smart meter are saving.

Q147 **Vernon Coaker:** Where is that?

***Daron Walker:*** For example, we did a study back in 2015 that showed that smart meters were delivering savings for people with smart meters. The British Gas data shows that people are saving 4% on their electricity.

Q148 **Vernon Coaker:** So this is out of date now.

***Daron Walker:*** That is an average figure across the market.

***Claire Perry:*** This is exactly why we have committed to do the analysis of the benefits. Now we actually have 25% of households with these things installed, we should have a much better database of what average household savings are. I take your point, Mr Coaker. It is hugely important, because this is being done on the basis that not only will your

household energy bills go down, but the cost of the network will go down because you no longer need to employ lots of meter readers, with all the faff and estimation.

It is really important that we test those assumptions on an ongoing basis, because I do not want to essentially end up with the legacy cost when the operating costs of the system have dropped. I am aware that energy bills will go up and down; we have brought the price cap in to try to provide provision, and there will be the impact of the wholesale costs, but in my view we have to demonstrate that this hugely important investment programme is dropping network costs going forward. One of the commitments we should be making to this post-2020 landscape is ongoing monitoring of what the actual operating costs are for suppliers that have installed these systems.

Q149 **Vernon Coaker:** It is really important because, if operating costs are going to be reduced as a result of introducing this, to the point the Chair was making to Ofgem earlier, one would expect that to be passed on to consumers. At the moment, if Ofgem is not ensuring that everybody is being made aware of that, if the information—let us put it politely—seems to need to be updated, where can the consumer go to say, "These operating costs have reduced as a result of the SMETS meters being introduced; therefore my bills should be coming down"?

The most up-to-date evidence produced by the National Audit Office, which is the independent body responsible for monitoring these things and the use of accounts, is the information in its latest report, published a couple of months ago. It shows that this is the first year that—on average, and I accept that point—bills are supposed to be coming down. That is where people should be able to go, and we as a Committee should be able to say, "Your bills should now be reducing".

***Claire Perry:*** The challenge with that, Mr Coaker, as you will know from all the work we did on the price cap Bill, is that bills are a wondrous thing, in terms of what is actually on there. For example, we have elements on the bill that show green policy costs, et cetera. There is a question about whether we should be showing these costs. Perhaps Rob could come in, but my suspicion is that, given that energy system operators have wildly different cost bases, from new companies that are almost entirely digital to legacy companies that are still a long way down the operating cost reduction curve, it will be very difficult to say, "That specific saving has come from that specific installation". I totally accept the point that, on average, if we are going through what should be the most digitised transformation of an energy system in the world, we ought to be able to see operating costs coming down.

***Rob Salter-Church:*** If it is helpful, I could explain how, within the default tariff cap we have introduced, the benefits that suppliers realise are passed through to the end prices. We have a specific allowance within the price cap for the additional smart metering costs that suppliers incur. That includes the efficiency benefits that they realise, and we use the

BEIS impact assessment to feed into that. We will use the updated one when it is available. There are a chunk of savings that go into that. The prices that customers pay are lower as a result of those efficiency savings being reflected in the tariff cap. Those customers who are protected by the tariff cap can be confident that the efficiency savings suppliers realise are passed through to them.

Q150 **Peter Kyle:** Daron, who benefits most from smart meters? We are pretty confident that vulnerable customers are not benefiting the most from smart meters.

***Daron Walker:*** You are asking a question about the distributional impact of the programme. We have done some research on this, some of which we published last year. We looked through that research on individual vulnerable groups and whether the benefits they achieved were consistent with non-vulnerable households. We found in most cases that they were. In some cases, particularly people with prepayment, they are much better off, because the service is transforming that whole landscape for prepayment customers.

There was one area where we found that there was more work to do, and that was in particular for people over 65. We found that they were very excited about smart meters. They liked the information they were getting, but they wanted more help post installation around how to use the IHD for full benefit and other things they might be able to do. SEGB, the organisation that is doing consumer engagement and helping ensure that consumers are benefiting from the programme, is going to focus on those groups in particular, both through messaging and by working with local partnership organisations, to make sure that local network people are going out, post installation, to help people over 65 who would like more help to make savings.

Q151 **Peter Kyle:** What can you as a Department do to ensure that that is delivered in the front line?

***Daron Walker:*** SEGB has three main objectives. One of them is about the specific needs of vulnerable consumers, to raise awareness and to make sure they get help and are supported in getting the benefits from smart meters.

Q152 **Peter Kyle:** When you complete your cost-benefit analysis in July this year, will that include analysis of vulnerable customers?

***Daron Walker:*** It will include the analysis and research that we have done recently. Going down to savings for individual households is much more difficult, but back at the start of the programme we did some trials looking at consumption savings. We found that customers in areas that had a high density of fuel-poor customers were saving equivalent amounts to people who were not in fuel-poor areas. We have some quantitative data and quite a lot of qualitative data.

Q153 **Peter Kyle:** Back to the question, when you complete your cost-benefit

analysis, will it be there?

***Claire Perry:*** It is a very important suggestion, and we should take it away and review how we might do that. As Daron said, there is evidence, if you take prepayment as a proxy for vulnerability, that it is working very well, but there are other customer groups that are not well served. This is part of the reason for the price cap. We could certainly look at whether we might commission some up-to-date research on how this programme is serving vulnerable customers.

Q154 **Peter Kyle:** Your inclination is that that would be a good thing.

***Claire Perry:*** Yes.

Q155 **Peter Kyle:** Finally to you, Minister, and changing subject slightly, you will be aware that a whistleblower within Ofgem was recently prevented from giving evidence before an employment tribunal because the Utilities Act was invoked in order to gag the whistleblower. We cannot and should not get into the details of that for obvious reasons, but in principle the judge in that case and Ofgem both agree that using section 105 of the Utilities Act to gag whistleblowers is in contravention of the European Convention on Human Rights. In principle, do you agree with Ofgem and the judge in this case, and if so what will you be doing?

***Claire Perry:*** I am completely unaware of this case. I apologise, Mr Kyle. I would need to think carefully about it, but in principle I am against any gagging for anything, whether it is in Parliament or anywhere else. I would be happy to consider it and respond to the Committee later.

**Chair:** That would be very helpful. Thank you, Minister.

Q156 **Caroline Flint:** By how much are the 2016 projections for the cost of the roll-out likely to be exceeded?

***Claire Perry:*** Based on the NAO report number, which I have no reason to dispute, the cost estimate is 4% higher with the end date of 2030, so approximately £500 million on a total programme cost of £11 billion.

Q157 **Caroline Flint:** That is probably the most conservative, reasonable estimate. Would you agree with that, Minister?

***Claire Perry:*** I have no evidence to suggest otherwise. I tend to like the NAO reports and the work that your Committee does in scrutinising it, so it is probably a reasonable estimate. I can say that, now we are in a position of having a meaningful cohort rolled out, we are much better able to understand the costs of installation, and indeed the operating costs of the DCC, which were theoretical when those numbers were put together. I believe those cost numbers are accurate.

Q158 **Caroline Flint:** The installation costs in 2017 were 50% higher than predicted in the estimates. What are you going to do to ensure that installation costs are brought down to projected levels?

***Daron Walker:*** This is a very important point. First, 2017 was not a representative year for looking at installation costs, because it was a time when a lot of the suppliers were scaling up their installer workforces and training them. They had people on their books being trained but who were not productive.

Q159 **Caroline Flint:** That does not sound very efficient, does it?

***Daron Walker:*** I suppose I am saying that we should not see it as something that will carry on through future years. We are finding that there are suppliers that meet the installation costs at our business case estimates, but you are absolutely right: this is an area that both the industry and the Government need to focus on to make sure that we optimise and drive that efficiency. The beauty of that one area is that the energy suppliers have all the right incentives to minimise the costs of installation, because they do not want additional costs either.

Q160 **Caroline Flint:** Is it fair to say that some of the reasons for energy companies and suppliers having staff waiting around for jobs that either are not there to do or they are not trained up for are to do with the way in which the project has been managed? We have already heard about delay to SMETS2. That led to an escalation of the installations of SMETS1 meters, even though they are going to be dumb. Is that contributing to the rise in these costs? It is a project management co-ordination problem.

***Daron Walker:*** The main reason for the costs being higher in 2017 was that they were scaling up their workforce, training them and recruiting them. It takes time before they are actively installing meters. But the heart of your question is whether energy suppliers need to get better at making sure they are efficient in the way they secure appointments and have fewer unhappy paths in terms of installations. They do, absolutely. We are working with them to share best practice, because there are suppliers doing it at a cost below our business-case estimates.

Q161 **Caroline Flint:** Have you done an evaluation of what the cost should be for installation or where you expect it to be, and therefore where you expect it to sit?

***Daron Walker:*** In our business case we have estimates for how much the costs are. As I said, there is one supplier beating that cost.

Q162 **Caroline Flint:** Which is that?

***Daron Walker:*** I cannot talk about that, because it is commercially confidential. But there is one supplier that is beating that cost. There are four suppliers that have outsourced their installation capacity that are meeting the costs in the business case. So there is reason to be cheerful, but it absolutely is an area we need to focus on.

***Claire Perry:*** This is a really important point. Again, I am rolling back to the broadband programme, but this is a foot in the door. You have a fixed

cost that you have built up in terms of your installer base; you have a fixed amount of time. The question is how you optimise those two things most effectively. It was quite clear that some companies were really good at targeting areas, going door by door, not missing appointments and texting people. There was contact. If people were dropping off their kids and said they would be back in 10 minutes, they did not disappear. There were others who just did not do that.

Q163 **Caroline Flint:** To be honest, though, Minister, in terms of good consumer service, none of that is rocket science.

***Claire Perry:*** I totally agree with you, 100%.

Q164 **Caroline Flint:** There is a question about handing it over to suppliers to deliver this scheme when the rest of the European Union is doing it through the network operators. That was a decision the UK Government made to do something completely different. It does not sound like some of these suppliers are particularly interested in good consumer service, which is worrying.

***Claire Perry:*** They are interested in good customer service for their traditional business model, not knocking on people's doors and installing a new technology. I entirely agree with you that the reason this programme, under a previous Administration, was given to the DSOs was that there was a belief that the relationship was there.

Q165 **Caroline Flint:** If you had been there at the time, would you have given it to the network operators?

***Claire Perry:*** I would not even like to go there. I have been learning a lot about the energy system. I did not know what a DNO was two years ago. Equally, I would say that the Department has been particularly focused, with Ofgem and working with suppliers, on trying to drive the cost of installation down and satisfaction up.

Q166 **Caroline Flint:** How many SMETS1 meters are going to have to be replaced and at what cost?

***Claire Perry:*** You mean during the course of the programme.

**Caroline Flint:** Yes, the SMETS2 programme.

***Claire Perry:*** We had this conversation yesterday. Would you like to answer?

**Caroline Flint:** And what will upgrades cost?

***Daron Walker:*** The ambition is that all the cohorts of SMETS1 meters will be enrolled without consumers needing to take any action.

***Claire Perry:*** Seamlessly.

***Daron Walker:*** In our cost-benefit analysis of the decision to enrol, we made an assumption that 2% might need replacing. That is an

assumption we made when we did the business case to make sure that we were including optimism bias, but our ambition is to get all of them in.

Q167 **Caroline Flint:** What is the cost of upgrades that will be necessary? Presumably there will have to be upgrades to the systems.

***Daron Walker:*** There is an interface that the energy suppliers will be able to use. That will be a common interface into the DCC, and then the DCC works with the SMSOs, smart metering system operators, so they then talk to that organisation, which can talk to the meter.

***Claire Perry:*** That transitional cost is baked into the current assumptions. Again, there are questions about whether you could get the cost down. For example, if you have an outside meter, why do you have to be at home for the changeover, even for the 2%? These questions are being tested. But my understanding is that the costs of what I describe as a seamless transition—i.e. you and I should not know about it; I have a SMETS2 meter now, but if you do not you should not know it is happening—are already baked into the system. There is a question about the 2%, which I do not know the answer to.

The other thing I would point out is that, of the £11 billion built into the original business case, £1 billion is for contingency. There is room within the original business case for potential—

Q168 **Caroline Flint:** I thought the contingency had been used up. Is that not the case?

***Daron Walker:*** No.

***Claire Perry:*** No.

Q169 **Caroline Flint:** How much is the Alt HAN system likely to cost? The Department's 2016 cost-benefit analysis does not take into account any costs for that.

***Daron Walker:*** You are right to say that there were only small amounts of cost in there, but £200 million is the latest estimate of what Alt HAN will cost, which is one of the things the NAO flags in its report.

***Claire Perry:*** That is then covered by the contingency. It is within the envelope.

***Daron Walker:*** Yes, exactly.

Q170 **Caroline Flint:** I had a figure of £230 million for the additional cost.

***Daron Walker:*** That is the latest estimate we have. The industry is still going through its detailed design with its vendors. That is our best estimate on a present-value basis.

Q171 **Caroline Flint:** What is your range? What is the range of the cheapest to the highest cost of the Alt HAN technology?

***Daron Walker:*** The present value cost estimate at the moment is around £200 million. That is the best estimate we have at this point.

**Caroline Flint:** You do not have—

***Daron Walker:*** Not yet, no. The process of the industry working with its vendors will define price, once it has completed its detailed design and signed contracts.

Q172 **Caroline Flint:** Is this likely to rise if more consumers than expected cannot be served by the original equipment or the extended-range dual-band communications hub setup?

***Daron Walker:*** If dual band did not get to as many as 95%, because Alt HAN is more costly, the cost would go up. But we are pretty confident that 95% is achievable with a dual-band solution.

Q173 **Caroline Flint:** Are you factoring in the worst-case scenario?

***Daron Walker:*** Because, as you rightly say, the Alt HAN costs were not fully costed in the 2016 CBA, we will need to factor those costs into the 2019 CBA update.

Q174 **Caroline Flint:** Are there any additional costs in terms of the communications hubs that are affected by the closing down of GPRS and 3G and the move to 4G/5G?

***Daron Walker:*** The contracts that the DCC is running for SMETS2 meters are now landed and the costs are fixed in there. Unless there is change, those costs are in there.

***Richard McCarthy:*** We can extend those to 2033, so it is quite a significant period on the current 2G network.

Q175 **Caroline Flint:** I suppose this is what I am trying to understand. There is this transition, and part of this is about how the technology could be future-proofed so we do not have problems we have had from SMETS1 to SMETS2 happening where people in 3G are moving to 4G or what have you. So I understand clearly, Mr McCarthy, what are the additional costs of that transition in terms of the communications hubs moving over to 4G/5G?

***Richard McCarthy:*** Those are not built in.

Q176 **Caroline Flint:** They are not built into the costs.

***Richard McCarthy:*** They happen outside the period of the cost-benefit analysis because we have the benefit of securing the 2G through to 2033. Therefore, they sit beyond the period of analysis. That is my understanding.

Q177 **Caroline Flint:** You are saying that future-proofing and changes to the technology have not been built into any cost analysis at this point.

***Richard McCarthy:*** You will have to answer that question, Daron. All I can tell you is that we have security of the system until 2033, which gives very sufficient time to manage the transition with the drop-off of 2G.

***Daron Walker:*** If there were further evolutions beyond that, it would form part of a new business case.

Q178 **Caroline Flint:** On the marketing and consumer engagement, Smart Energy GB was assigned £192 million and tasked with the awareness raising campaign for smart meters over the period of 2013 to 2021. Delays to the roll-out mean that they are likely to need additional funding. How much is that going to be?

***Daron Walker:*** Are you talking about additional funding for SEGB?

**Caroline Flint:** Yes, Smart Energy GB.

***Daron Walker:*** At the moment SEGB is sticking to its budget of around £200 million. We do not have evidence that we need to address that at this point. I have no additional data on that.

Q179 **Caroline Flint:** There have been a number of advertising campaigns that, because of the delays in roll-out, have maybe just been wasted money. Would you agree with that?

***Claire Perry:*** We have almost 13 million of these things installed. We have hit 25% of households already, with all the challenges we have discussed about consumer engagement and getting the foot in the door. The evidence is quite strong that, when people have them, they like them and recommend them to their friends. I do not think it has been wasted. I am not sure that Gaz and Leccy are particularly compelling. However, some of the more recent advertising I have seen is really quite compelling. As a greater the cohort is installed and more suppliers engage with people by offering half-hourly settlements and better time-of-use tariffs, you essentially have a base there who become advocates for the system.

Q180 **Caroline Flint:** Are you aware that Smart Energy GB, apparently, due to its recent series of adverts, is currently under investigation by the Advertising Standards Authority for misrepresenting savings?

***Claire Perry:*** No.

Q181 **Caroline Flint:** Apparently, despite the money that is pooled together from the energy suppliers for Smart Energy GB to do its marketing work, the energy suppliers have basically spent significant additional funds on their own smart meter advertising campaigns, which was not originally anticipated. That could cost something like £200 million in additional spend. That is a duplication cost on bill payers, is it not? Who is monitoring that?

***Daron Walker:*** When we made our business case assumptions, we looked at two things. We had to look at what people already spend when they are advertising to acquire new customers, to retain customers and to do their brand management for traditional metering, and what they are doing and would need to do in addition for smart metering. We factored the additional costs into the business cases for SEGB, but we expected and continue to expect it to repurpose its already existing budgets to focus on combining its offerings with smart metering, which we think is in its interest and in consumers' interests.

Q182 **Caroline Flint:** I am going to move on to monitoring. One of the aspects of this programme is that, because it is being led by industry in terms of delivery, it does not have the usual level of oversight on how spending happens. The NAO has raised concerns about this. Why has there been a three-year gap in the production of cost-benefit analysis for the programme?

***Daron Walker:*** We have a good track record of updating the CBA. We have tended to update it when there is material new evidence to say that the costs and benefits have changed. We updated it in 2011, 2012, 2013, 2014 and then again in 2016. We have been waiting for better evidence on the costs of SMETS2 and the roll-out of SMETS2 to update our business case. That is why we have committed to doing it this year.

Q183 **Caroline Flint:** Even if there has not been any particular change, why would you not do an annual production of something like that to give everyone reassurance that it is on track?

***Daron Walker:*** It is a major undertaking. Lots of data and evidence needs to be collected. You want to have the most up-to-date data. We will be getting a new set of data from the different parties, including the energy suppliers, early in February. That will be used as part of our update to the business case.

Q184 **Caroline Flint:** To Mr Salter-Church, why have you not asked the DCC to bear more of its rising costs instead of passing them on to consumers?

***Rob Salter-Church:*** I might start by just explaining how the DCC price control works. On an annual basis, the DCC sets out the spending it has made and its forecast for future spending. We scrutinise that to see whether there have been inefficiencies in its spending and, if so, we take that money off it and claw it back. That regime creates a strong deterrent effect on DCC to spend its money efficiently. If you look just at the amount of money we have disallowed from DCC, you only get half the picture, because the deterrent effect of the regime in and of itself helps it keep its costs efficient.

As the NAO identified, DCC costs have increased, but there are some legitimate reasons for that. At a high level, there are two key drivers for why DCC's costs have increased. One is the detailed design work it had to complete post licence award. That introduced additional complexity and additional testing requirements. Secondly, there are a number of

activities that it was always known DCC would have to undertake when the licence was awarded, but they were not fully scoped out and therefore not costed. Those are the two key drivers of the main increases in DCC costs. Richard may want to provide further information, if the Committee would find it helpful.

Q185 **Caroline Flint:** Maybe you could write to the Committee in more detail about that. If these things are happening, Mr Salter-Church, would it not help to have a regular, at least annual, cost-benefit analysis that would take into account additional pressures leading to additional costs? That should be an annual feature.

***Rob Salter-Church:*** From Ofgem's perspective, we operate the price control in a transparent way. We publish our proposals, they are subject to consultation, and then we publish our decisions that set out what DCC's costs are and the size of any disallowances we have made.

Q186 **Caroline Flint:** I am conscious of time. One of the big aspects of this programme has been energy savings. From 2005 for the next 10 years, energy usage in the UK has been a trend going downwards. That is 10 years before smart meters were installed. Given that there are 11 million installed meters, why is it that there has been no attempt to take the data analysis of usage of energy and compare it with people on standard meters to have a better idea of the impact of smart meters on people's energy usage? You already have the data there to potentially analyse this. Why has that not happened? We could have better answers to the question about whether smart meters are making any real difference against a backdrop of increasingly low levels of usage among the public.

***Claire Perry:*** That is a really important point. That is exactly what we want this year's analysis to look at. Again, we have had independent numbers, particularly from Centrica, saying that the achieved savings they are seeing are twice as high on dual fuel as were originally projected. But I agree, Ms Flint, given your knowledge of the energy market. Of course, we have had energy efficiency improvements, which have driven down overall savings, but trying to understand this and seeing how we could improve reductions in energy consumption should be a real focus of the programme going forward.

Q187 **Caroline Flint:** Finally, will the Department review its position on having a representative from the Treasury on the board for the programme?

***Daron Walker:*** This is one of the things the NAO talks about. This is a different type of programme from the traditional Government programmes where you spend taxpayers' money. The Treasury was fully involved in the—

Q188 **Caroline Flint:** Excuse me, Mr Walker. The problem here is that if this was on the books there might be greater oversight on how taxpayers' money was being spent. Because it is being done through the industry, through bill payers, there seems to be a complacent attitude towards this.

***Daron Walker:*** We are definitely not complacent.

Q189 **Caroline Flint:** It is Government policy that is driving this. Therefore, Government policy is driving the increase in bills for consumers.

***Daron Walker:*** Fundamentally, all we do is try to make things as good as possible for consumers. We have a tight price-control regime through the bits of the system that are a monopoly. We fundamentally scrutinise and care about the costs of this programme as much as consumers do.

**Caroline Flint:** They are escalating; they are going up; there is no sign that they are going to go down.

Q190 **Sir Patrick McLoughlin:** When was the decision taken to include gas in smart metering?

***Daron Walker:*** It was right at the outset, the main reason being that in GB we have a lot of gas penetration. A lot of the energy supply savings are based on not needing meter readers, call centre traffic from estimated bills, better debt management and prepayment. It is almost 90% of gas customers. If you did not include gas, you would lose all those savings because you would still need to do all those things for gas only. In this market, gas made sense if we were going to achieve the benefits in the business case.

Q191 **Sir Patrick McLoughlin:** Yet very few other countries have followed suit.

***Daron Walker:*** Other countries have lower penetrations of gas. That is one of the reasons. When we looked at our business case, it was very clear that without gas the savings would have been much lower.

***Claire Perry:*** I asked exactly this question. The reason this programme rolled out so rapidly in Italy is that it is pretty much all electric and people have their meters outside. Because we have this unique usage in the UK of gas for heating and cooking, and because so many suppliers have now consolidated into dual-fuel providers, it made perfect sense to include both, given that it does have some complexity, which we now have to solve.

Q192 **Sir Patrick McLoughlin:** Is one of the reasons it is costing a lot more in this country than in other countries, because we are doing both gas and electricity? If we were not doing gas, would it be a lot cheaper.

***Daron Walker:*** You would have lower costs on assets but much lower savings. Overall, the net present value would be—

***Claire Perry:*** The answer is yes. Part of the problem is that we have complexity in the system, in that we have dual-fuel meters, which are not always outside the property and therefore accessible remotely. For gas installation, although I only have electric, because I am off grid, I know there is a safety element to the gas meter changeover, which of course means you need quite qualified installers to do that meter switchover.

***Daron Walker:*** The benefits to society will be much lower. The other thing is that the costs are not that much out of kilter with the rest of the EU, when you look at the detail.

Q193 **Antoinette Sandbach:** I just wanted to raise one issue. I know smart meter roll-out is supposed to be free. I have come across a position in my constituency on a park home site where park home residents are being charged for the move over to smart meters. Is that something you are aware of, Minister, or, indeed, is Ofgem aware of it? What can be done to prevent that particular segment of society from being unfairly targeted?

***Claire Perry:*** I would be very happy to look at that and come back to the Committee, because that does not feel appropriate.

Q194 **Chair:** Thank you. That would be very helpful, Minister. Can I just pick up one question that I asked at the beginning, which we did not then come back to? There is this issue about customers in the north not getting the SMETS2 meters. Richard, you said that 5,000 people got a meter in one day. How many of them were north of Leeds?

***Richard McCarthy:*** You may remember that the Minister said the figure reached at the end of last week was 10,000 meters in the north, including Scotland. That number has gone up by 10% in the last two days.

Q195 **Chair:** This is SMETS2.

***Richard McCarthy:*** They are SMETS2 meters.

Q196 **Chair:** That is now working. Are there any problems outstanding?

***Richard McCarthy:*** To be quite clear, you will be aware that the Department has agreed a derogation with us that allows some meters with slightly higher levels of radio frequency to be used during a nine-month window while we get those meter manufacturers, as they are doing, to make the necessary modifications. There is no impact on operability or security by allowing that.

Q197 **Chair:** What is the impact on cost?

***Richard McCarthy:*** That maintains the programme. The cost has to be borne by the meter manufacturers making the modifications to meet the specification. That has not changed.

Q198 **Chair:** Maybe you can just set that out to us in a brief letter.

***Claire Perry:*** Given that a third of our households are in the north, this northern question is really important. I intend to make that part of my monitoring focus going forward.

Q199 **Chair:** Thank you. Maybe we could have a little more detail on what the solution is and whether customers in the north are in any way disadvantaged now because of lesser functionality. That would be very helpful.

***Richard McCarthy:*** I can assure you that there is no loss of functionality at all. They are simply having, in some cases, meters with a slightly higher level of radio frequency. It is not audible and it is not insecure. That will allow time—it is literally a matter of months; it is a nine-month period from November last year—for the meter manufacturers involved to make the modifications. They have agreed they can be made, and we are waiting for that.

**Chair:** So there was an issue and you have now sorted it.

***Richard McCarthy:*** That is correct.

**Chair:** Thank you very much for coming to give evidence today. Ofgem, we look forward to hearing from you with the information about failing suppliers that you could not remember. We will publish that information, so we will know who is not delivering on their obligations to consumers. Thank you very much to all four of you for coming to give evidence today.