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11th September 2020

**Citizens Advice response to 'Electricity retail market-wide half-hourly settlement: consultation'**

Dear Anna,

Thank you for the opportunity to respond. This submission is not confidential and may be published on your website.

Citizens Advice, as the statutory advocate for energy consumers, has provided extensive input into the smart meter rollout, market-wide half hourly settlement, network access reforms and energy retail market reforms. We are pleased to see the draft impact assessment ahead of the final version.

Half hourly settlement is vital for the development of the electricity retail market in Great Britain as it can enable improved services to the domestic and microbusiness markets through better billing accuracy, greater network efficiency, reduced costs and lower carbon emissions.

Citizens Advice supports the development of price signals in the electricity market to incentivise suppliers and consumers to use energy in a way that is more cost and carbon-efficient. Our support, however, is subject to appropriate protections and support being put in place, especially for people in vulnerable circumstances.

Ofgem's preferred option for requiring a prompt transition to HHS places greater pressure on the market to engage consumers on settlement reform and load shifting options. Citizens Advice want to see an inclusive approach to accessing benefits from Market Wide Half Hourly Settlement (MHHS). Therefore we support regulation to require exposure of suppliers to half hourly price signals. We expect this to lead to the better development of services that benefit consumers with low engagement with their energy, as compared to the counterfactual scenarios. This could include smart local energy

systems or third party intermediaries that support households in choosing how to use energy in ways that are important to them.

Citizens Advice welcome Ofgem's preferred delivery mechanism and timeline, which provides an outline for the technical delivery of market-wide half hourly settlement. We are pleased to see that, as part of this approach, Ofgem has maintained a consumer opt-out for data sharing to encourage trust and positive engagement, particularly during the transition. We think there needs to be an easy option for consumers to exercise this opt-out and outline our reasons in our response.

There should also be a benefits realisation strategy to ensure MHHS delivers positive consumer engagement and inclusivity. As the Impact Assessment makes clear, risks to realising the proposed benefits and maximising the return on investment will be dependent on consumer trust and engagement with the changes to their services. At this stage, we understand Ofgem's emphasis on delivering the technical capabilities to reform settlement, however, benefits realisation must be a core part of the process now, and in each of the subsequent phases of the project.

### **Ensuring benefit realisation through protection, support and engagement**

The impact assessment does not currently include a clear consumer proposition for the change created by half hourly settlement. We agree that it should be suppliers that offer tariff propositions to consumers. We would, however, encourage strategic coordination of the consumer transition to MHHS to maximise awareness of the value proposition inherent in settlement reform. We think there should be a clear consumer offer, that links consumer protections, data sharing options, tariff changes and encouraging behaviour changes to the potential benefits. For example, our research highlights how there is an opportunity to positively frame ToU tariffs as delivering an environmental upside<sup>1</sup>.

Ofgem state that: *"The strategic objective is to minimise the overall cost to current and future consumers of moving to a net zero carbon electricity system while maintaining security of supply and system efficiency."*<sup>2</sup> We think this objective should be met by considering how and where it will be appropriate for as many consumers as possible, including those that are less likely or unable to engage with their electricity to have positive, low-risk engagement with load shifting and smart tariffs. There is also consumer value where engagement leads to an informed choice not to use these

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<sup>1</sup> Citizens Advice, 2019, [Future for all: Making a future retail energy market work for everyone](#) p20

<sup>2</sup> Ofgem, 2020, Electricity retail market-wide half-hourly settlement: draft IA p6

products. Meeting this objective will require appropriate protections, provision of support and appropriate supplier engagement to help maximise the uptake of demand flexibility from consumers in order to increase the efficiency of electricity networks. This objective should also encourage more engagement with the retail electricity market and fairer access to the benefits of settlement reform.

As outlined, MHHS will incentivise suppliers to deliver solutions to change consumer behaviour to balance their energy load profiles. We think more should be done by Ofgem to define parameters for how this can be done to help realise the benefits from MHHS. The outlined objective, alongside the anticipated competition amongst suppliers to shape their load profile, should also not expose consumers to adverse outcomes. For example, the steps a supplier may take to avoid an undesirable consumer load profile that could be detrimental to a consumer. We outline possible issues further in our response.

Ofgem approach to tariff detriment is outlined as: *“we will ensure that those who cannot provide flexibility are not unduly disadvantaged.”*<sup>3</sup> This statement implies there are consumers who could be ‘duly disadvantaged’. This needs to be defined more clearly. We accept that there are consumers that use high amounts of peak electricity and might be duly encouraged to change behaviour through higher peak costs. However, there are numerous ways a consumer might be disadvantaged whether they select a TOU tariff or not if there aren’t consumer protections in place. Research we commissioned from Traverse on Understanding High and Low Electricity for consumers in vulnerable situations highlight the complexity in some high load scenarios<sup>4</sup>.

The way in which the tariff increases and supplier behaviours are viewed could have a negative impact on consumer trust, which targeted protections can address. While for consumers that want to be green and help meet net zero there is a strong rationale to provide low or no risk tariff options to encourage engagement with load shifting.

We think that those in vulnerable circumstances and those in fuel poverty (using a smart tariff or not) who might struggle to manage their bills should be actively supported. There is already a large group of consumers that do not engage with their current energy retail options despite the options and support available to make a relatively simple change. Three-quarters (73 per cent) of low-income households had not switched fuel supplier in the last two years, and this was higher still among the digitally excluded (83 per cent)<sup>5</sup>. Reasons for not switching included risk aversion and

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<sup>3</sup> Ofgem, 2020, Electricity retail market-wide half-hourly settlement: draft IA page 5

<sup>4</sup> Citizens Advice, 2020, Understanding High and Low Electricity usage

<sup>5</sup> Davies et al, 2016, Paying to be poor page 6

the need to retain tight budgeting control. We want MHHS and the increased complexity of engagement with new tariffs to avoid further aggravating those perceptions and remedy, rather than broaden the disparity, between a protected or default tariff and the better rates accessed by those that can confidently engage with their energy.

**Recommendation: produce a benefits realisation strategy focused on protections, support and engagement**

Given the potential consumer savings, environmental and network efficiency benefits, we encourage Ofgem to work closely with suppliers to produce a benefits realisation strategy that maximises load shifting through appropriate engagement. We think this will limit consumer detriment and help maximise consumer receptiveness across a range of consumer groups before and during the time-limited year of migration to MHHS and new tariffs.

This strategy should include modelling of the wide variety of consumer energy retail journeys and preparing proactive protections for consumers to maximise trust in the settlement and tariffing transition. We would expect this to then require a strategic consumer engagement strategy for MHHS that, via suppliers, creates consumer awareness of these protections. Also, there should be information on the transition that can be accessed from an impartial source.

A coordinated approach should help link together and build awareness of the settlement implications for consumers. This includes awareness of changes to data sharing rules, the supplier incentivisation to offer new tariffs, the collective net benefit of new tariffs and load shifting. There should also be further consideration of the inevitable increased complexities of electricity options and support required to navigate these challenges.

Our response to the consultation questions are outlined below.

Kind regards,

Ed Rees

Senior Policy Researcher

**Citizens Advice**

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**1. We propose to introduce MHHS on the basis of the Target Operating Model recommended by the Design Working Group last year. Do you agree? We welcome your views.**

The Target Operating Model (TOM) needs to be able to meet current and future needs of a rapidly evolving electricity system. The decentralisation and decarbonisation of energy are likely to require innovative metering and sub-metering solutions, aggregation and trading platforms and new supply models. These developments should facilitate reduced costs and carbon emissions for consumers. This transition should also enable more community and localised engagement with energy options. For consumers, this could be an important way of bringing the benefits of flexibility to life through a better awareness of their energy system.

Local energy strategies could become a valuable way to encourage consumers to engage more with their energy options<sup>6</sup>. Particularly in rural areas where certain energy costs can be avoided through local generation. To address the engagement, trust and uptake risks in MHHS, it would seem sensible that there are resources available to local energy strategies to support local schemes and consumers to navigate settlement options and data sharing that enable consumers to engage with peak shifting.

We believe the preferred TOM will be positive for smaller entrants since the settlements process will be simpler, faster and should mean lower credit cover costs. In principle, we welcome that the TOM enables the potential for multiple different parties (other than the supplier) contracting with consumers. This may help engender competition between suppliers and other retailers but this should not water down consumer protections with their electricity service.

The TOM should also facilitate competition and innovation in the delivery of metering, data retrieval and processing. Reducing barriers to entry will enable more opportunities for innovation in electricity system development. The TOM should support the development of new technologies or other innovations by providing HH Meter data (in aggregate form or from individual MPANs) to new participants. However, such data provision would need to have tight governance arrangements and privacy rules around them.

We expect that innovation and competition in this space has the potential to provide value to consumers. However, it is not a given. Citizens Advice think that there needs to be careful consideration of any changes that impact the functionality of meters, IHDs or

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<sup>6</sup> Citizens Advice, 2020, Striking the right balance

the interoperability of the supply market. We are particularly mindful of this when considering the potentially valuable industry modifications that pave the way for innovation and competition in settlement through accessing or fragmenting consumption attribution for settlement. This includes P379 and P375.

There is a range of ways in which Ofgem should be looking to address adverse consumer outcomes in this transition through protection of the consumer experience. Key examples include:

- ensuring IHDs are used by TOU providers in a uniform manner
- ensuring tariff options are clear and understandable and can be meaningfully compared and
- that consumers can access their electricity use data in a way that enables them to have confidence about their privacy and to understand their energy use better.

### **Load shaping in the TOM**

The TOM needs to more accurately settle consumers electricity charges in all circumstances. We, therefore, welcome the load shaping service proposal for those consumers opting out of half hourly reads.

The current profiling system is based on a very small number of sample of sites from which Elexon draws HH data, which means the accuracy with which they are reflecting consumers' usage patterns is relatively low. The proposed system in MHHS will use a greater sample of HH data to create load shapes, making them more robust and reflective of real electricity consumption patterns.

We are keen to understand the remaining or new inaccuracy risks in the load shaping service. It is possible that, for whatever reason, usage patterns of HHS households are not representative of those of non-HHS households. It will be important for Elexon and Ofgem to monitor whether there are any significant differences between the households who are and are not HHS.

Before the load shapes are actually used to settle consumers, there should be modelling done to test the impact of the new method for a variety of different users to establish the distributional impact of any changes. Once introduced evidence should be drawn on the impact for consumers who will be settled using the load shaping service. Given we do not know yet who will be half-hourly settled first and therefore whose data will be feeding into the load shaping service, it is hard to predict the accuracy and representativeness of the new model at this moment in time. It will, therefore, be crucial

to take a cautious approach and test and monitor how the application of the load shapes affects supplier imbalance, and ultimately consumers, both initially and in the future.

We are concerned that some NHHS customers that will be settled using load shapes could unfairly end up paying more than under the existing profiling system. Compared to profiling times, when this was the majority of customers, in the future the NHHS customers will be a minority, who may have more expensive 'peaky' use. Particularly we are concerned for those customers who end up in this category through an inability to engage with HHS options, for example, because they cannot have a smart meter.

## **2. Ofgem's preferred position is that HH electricity consumption data should be sent to central settlement services in non-aggregated form. Do you agree? We welcome your views**

Electricity consumption sent to central settlement services in non-aggregated form has clear advantages for settlement. This granularity of access will enable Elexon to sum half hourly usage data in different ways and feed that insight into Project TERRE, network charging and settlement. However, the full case for this development includes how the data will be available to third parties who could access this pool of MPAN level usage data from Elexon. We hope this will enable consumer access to data, public service outcomes, research and the development of innovative services.

Ofgem have not provided a complete overview of how they expect consumer energy use data will be controlled by consumers and accessed or used by others. This makes it difficult to consider how consumers are expected to respond to sharing data through settlement.

The provision of non-aggregated data for central settlement services is potentially a major change to the way in which data is shared in the energy industry and it is not clear why this solution is optimal amongst other methods of data sharing. The way in which this could present opportunities for intermediaries to use consumer data to provide services needs greater clarity, particularly how it impacts and sits alongside the existing role of the DCC.

Given the work of the Energy Data Taskforce on unlocking the value through access to data, we think there needs to be further work by Ofgem to provide a clear approach to the access and provision of non-aggregated consumer data. Citizens Advice believes that consumers have a right to understand how their data is protected and what the opportunities for themselves and their chosen intermediaries to engage with their data.

As more people in the energy system access consumer energy data, it is vital that consumers are able to understand how and why it is being used<sup>7</sup>. The ability to opt out of half hourly data sharing provides a mechanism for control - but its ease of use will be highly dependent on each supplier's approach to providing that option. Given the risks to the benefits realisation stem from consumer engagement, there should be a more clearly defined proposition.

**3. We propose that the Initial Settlement (SF) Run should take place 5-7 working days after the settlement date. Do you agree? We welcome your views.**

We support an efficient and cost effective timescale for the initial settlement run. We are not able to evaluate the merits of the proposed timings.

**4. We propose that the Final Reconciliation Run (RF) should take place 4 months after the settlement date. Do you agree? We welcome your views.**

We support an efficient and cost effective timescale for the final reconciliation run. We are not able to evaluate the merits of the proposed timings.

**5. We propose that the post-final (DF) settlement run should take place 20 months after the settlement date, with the ratcheted materiality proposals described in chapter 4. Do you agree? We welcome your views on this proposal, and in particular about its potential impact on financial certainty for Balancing and Settlement Code parties.**

We support an efficient and cost effective timescale for the post-final settlement run. We are not able to evaluate the merits of the proposed timings.

**6. We propose to introduce MHHS for both import and export-related MPANs. Do you agree? We welcome your views.**

We support Ofgem's approach and the DWG view that excluding export would diminish the benefit of MHHS, especially for enabling innovation, the transparency of export and impact on the accuracy of settlement.

We think that consumers' electricity metering should be as accurate as possible and should provide a joined-up experience that is easy to engage with. With the increasing decentralisation of generation and the anticipated increase in local storage and

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<sup>7</sup> Citizens Advice, 2020, Clear and in control



generation capacity that can export to the grid, accuracy of export will be increasingly important. Consumers will also need to better understand the implications of their export for cost and carbon emissions.

As a result, it is optimal from a consumer experience to be settled for import and export MPANs through the best available price signal. It will encourage better consumer solutions and engagement if MHHS is introduced for both import and export.

There have been a number of issues with the way that smart meters measure export to the grid. To ensure that the benefits of half hourly settlement are realised, we support alignment in the way in which imports and exports can be read.

HHS of export electricity would enable consumers to be paid a market price for the electricity they export - which for some will be less and for others will be more than they are currently paid. Those consumers who provide electricity at times when the grid needs it most will see the greatest value. We expect that, with more accurate data around how much a consumer produces and when, suppliers will develop more attractive offers around export tariffs. In the longer term and on a system-wide level, we'd expect to see lower system costs and therefore lower overall costs to the consumer. However, during the transition phase, it is vital for consumers to understand that the way in which their bill is calculated may change.

**7. We propose that the transition period to the new settlement arrangements should be the same for import and export-related MPANs. Do you agree? We welcome your views.**

As stated above, it will benefit consumers by aligning the MHHS processes for import and export as closely as possible. This includes the transition phase.

A prompt transition phase for settlement should maximise the concentration of messages and engagement activity relating to a transition in the way electricity bills might be affected. This increases the chances of consumers engaging with changes to either their export or import settlement, tariff changes or energy data options.

The number of smart meters installed needs to be maximised to encourage the relevancy of any engagement relating to the implications of settlement change. However, given the importance of MHHS we don't think this benefit will outweigh the benefits of delay. From a consumer perspective, the later the implementation of HHS for export, the later the potential individual value of higher export payments and the communal value from system benefits will reach the consumer.

**8. We propose a transition period of approximately 4 years, which at the time of analysis would have been up to the end of 2024. This would comprise an initial 3-year period to develop and test new systems and processes, and then 1 year to migrate meter points to the new arrangements. Do you agree? We welcome your views.**

The benefits for those that can access the direct benefits of half hourly settlement will be those that have a smart meter. Delays to the rollout will mean that consumers wait longer for the significant benefits of HHS. Government targets before COVID-19 were for at least 80% of consumers to have a smart meter by 2024, but this was before installations largely stopped for several months.

Given the delays to the rollout of smart prepayment, Alt-Han, dual-band and 3 phase smart meters, there appears to be a risk that consumers that require these meters could still be those less likely to have smart meters in 2024. This creates a risk that people who cannot access HHS, through no fault of their own, won't be able to access certain offers and tariffs and will have higher bills. The risks and transition principles to provide some mitigation are outlined in Q15.

We think a 12-month migration is appropriate because a long period of migration could lead to a greater distributional impact between those consumers who already are electively under HHS and those who are not. This would be because there is also a risk that profiles for settlement become increasingly inaccurate for consumers not settled half hourly. Also, that supplier propositions for certain consumer groups will not develop.

The migration process should be seen as a priority period for all consumers to access to clear information from an impartial provider about the benefits of improved settlement. Please see Q15 response for more detail. There are, however, likely to be a number of consumers that can't engage with this process without smart meters. These consumers will also need this information after the migration phase when their new meters provide access to HHS.

**9. We have set out high-level timings for the main parties required to complete a successful 4-year transition to MHHS. Do you agree? We welcome your views, particularly if your organisation has been identified specifically within the timings.**

We are not in a position to evaluate the supplier and key agent timescales to deliver MHHS in the proposed timescale. However, we view the implementation of HHS as a crucial system development that needs to be prioritised amongst Ofgem's competing priorities. Once the smart meter rollout has sufficiently progressed, HHS should follow

shortly after. The combined opportunity of better engagement, efficient grid balancing and a greener energy system means that HHS needs to be progressed promptly.

**10. What impact do you think the ongoing COVID-19 pandemic will have on these timescales?**

COVID-19 impacts at this stage are still developing and a retrospective assessment is not possible. What is clear is that there has been an impact on energy system reforms that will impact MHHS readiness. The smart meter rollout, governance reforms and charging reform delay will increase the difficulty of implementing the planned settlement reforms in the proposed timescales.

**11. We propose that there should be a legal obligation on the party responsible for settlement to collect data at daily granularity from domestic consumers who have opted out of HH data collection for settlement and forecasting purposes. Do you agree that this is a proportionate approach? We welcome your views.**

The Data Access and Privacy Framework was created in extensive consultation with industry and consumer groups with the goal to: "*promote competition and innovation in the developing energy services market*" and<sup>8</sup> "*place the onus on energy suppliers to clearly explain why they wish to access this information and incentivise the development of products and services to offer to consumers in return for more detailed access*"<sup>9</sup>. It achieves this by allowing consumers choice over what detail of smart meter data they share, which in turn incentivises suppliers and other parties to offer clear benefits to consumers in exchange for this access to their personal data. Any changes to the rights the DAPF affords consumers warrant significant scrutiny, especially so recently after BEIS' 2018 review<sup>10</sup>.

Of particular import are the consumer opt-outs for sharing of smart data. In acknowledgement of the potential value of HHS, we have accepted moving some thresholds from opt-in to opt-out but have consistently opposed the removal of consumer choices entirely. Our concerns were laid out in more detail in our letter

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<sup>8</sup> DECC, 2015, Smart Metering Implementation Programme

<sup>9</sup> BEIS 2018, Smart Metering Implementation Programme: Review of the Data Access and Privacy Framework

<sup>10</sup> BEIS 2018, Smart Metering Implementation Programme: Review of the Data Access and Privacy Framework

responding to Ofgem's Decision for access to half-hourly electricity data for settlement purposes.<sup>11</sup>

Many consumers have expressed concerns about the use of their smart meter data and the provisions in the DAPF have been used to reassure consumers that they retain control<sup>12</sup>. We know from our own research with consumers that the existence of an opt-out provides significant reassurance to consumers that they can trust and use a survive even where they may not make use of those opt-outs<sup>13</sup>. Many consumers who currently have a smart meter agreed to have it installed on the basis that they had the right to restrict access to their data should they wish. Removing the ability to opt-out after this decision has been made risks consumers feeling that they have been misled. As smart meter consumers signed up based on the DAPF, they should have their views respected.

Maintaining an opt-out down to monthly meter reads, as per all existing marketing and communications materials, will allow any consumers concerned about the access and use of their personal data to opt out while enabling the electricity system to benefit from more accurate information from the likely majority of consumers who remain opted in by default. With regard to the hypothetical risk of consumers who use a great deal of energy at peak times opting out of more detailed data access in order to avoid higher charges, we would note that such consumers are also unlikely to opt-in to a time of use tariff (and in doing so grant access to half-hourly meter data) in the first instance. If evidence emerges that this is a significant issue we would support a further investigation into potential mitigation in the future. However, to pre-emptively strip consumers of a key data choice enshrined in the licence condition because of the potential risk of a practice that does not currently exist would be overly onerous and disproportionate.

Proposals that consumers' default data settings be altered when they sign new agreements (e.g. signing up a for a new tariff) are also of concern. There would be a significant risk that any communications about a change in data rights would be missed by consumers as they navigate the tariff changing process. If changing to a Time of Use tariff consumers may reasonably expect that there would be an increased need to share half-hourly data but no such need would be intuitive where they are simply changing between standard tariffs. There is a high-risk that consumers will find themselves voiding their existing rights without realising. We encourage industry coordination of

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<sup>11</sup> Citizens Advice, 2019, Citizens Advice response to Ofgem's Decision for access to half-hourly electricity data for settlement purposes

<sup>12</sup> Citizens Advice, 2020, Clear and in control

<sup>13</sup> Citizens Advice, 2020, Clear and in control

supplier communications to ensure consistent presentation of consumer options and benefits of improved settlement.

**12. Existing customers currently have the right to opt out to monthly granularity of data collection. We are seeking evidence about whether it is proportionate to require data to be collected at daily granularity for settlement and forecasting purposes for some or all of these consumers. We welcome your views.**

As noted in our response to Q11 and in our 2019 letter there is a significant risk to forcing consumers to share data they had previously been assured they had control over. The DAPF was crafted over an extended period in close collaboration with industry and consumer groups to ensure that consumers were granted some leverage to ensure that benefits from smart metering were shared with consumers and electricity suppliers. The recent review conducted by BEIS concluded that its balance of consumer control and industry data access remains appropriate. Alongside reassurance that they retained control of their data which we know is of vital importance to consumers, the DAPF was also crafted to incentivise electricity suppliers to offer something in exchange for more detailed data access. Removing the ability for a consumer to opt-out effectively removes that incentive on suppliers.

There is also a significant reputational risk for the rollout in eliminating consumer choice. For many years public facing advice from organisations like Citizens Advice, Smart Energy GB and suppliers themselves has highlighted the right to opt-out down to monthly meter reads. This has proven a very effective tool in addressing the concerns of consumers about how their data are used. Altering how much data is shared by default can fit within these communications. Eliminating consumer choice entirely would require significant communications and the correction of a large amount of existing consumer advice. There is a risk that this would generate a backlash and renewed attention on the data implications of smart metering if this takes place - particularly from consumers who agreed to have smart meters installed because they had previously been assured that they had the ability to opt-out to monthly meter reads. We would note that for many consumers the existence of this choice is reassuring even when they do not exercise it.

**13. Should there be a central element to the communication of settlement / forecasting and associated data sharing choices to consumers? For example, this may be a central body hosting a dedicated website or webpage to which suppliers may refer their customers if they want more information. If yes, what should that role be and who should fulfil it? We welcome your views.**

As outlined in the introduction and in response to Q15, the need for consumer engagement with half-hourly settlement extends beyond information about consumers data sharing options with their supplier.

For example, a web page with clear information about data sharing options presented in impartial and consumer-friendly language would likely be a useful asset for consumers. Particularly if it comes from a trusted and independent source, and the content or a link to the page is widely used by suppliers. However, this would be a missed opportunity for a more coordinated proposition to begin to engage consumers with the opportunities presented by settlement reform and tariff changes, which requires a large scale consumer behaviour change to realise the anticipated benefits.

A single webpage will be able to provide consumers with information. However, to actually take action on their data choices a consumer would, as currently proposed, need to follow an undefined supplier process to adjust their settings.

There would seem a strong chance that when new electricity contracts are introduced following the data transition it is unlikely a consumer will realise that anything has changed. Unless each and every supplier has to make an effort to inform consumers and then have processes for consumers to adjust their preferences. This seems like a fragmented approach and a hard message to communicate.

There is a risk that consumers' ability to adjust their data privacy settings will be presented to them in multiple different ways and processes by suppliers. This means consumers or advice organisations cannot support consumers easily through the process. This will complicate a consumer journey in which a consumer learns about the energy options made possible by settlement reform.

We think that that provision of information about settlement and tariff changes should include a method of enabling consumers to manage their data permissions directly. This will require a mechanism for settlement permissions to be updated centrally. So that if a consumer is on a standard tariff and wants to continue to provide the minimum amount of data required to their supplier (opt out) they can do that easily. However, this tool should also clearly explain to consumers the protections, opportunities and benefits presented by half-hourly settlement and smart tariffs.

This could be an opportunity to inform consumers about the forms of protection that consumers should have that reduce their exposure to risks of bill increases on new tariffs. It is also an opportunity to ensure a greater range of consumers engage with the

potential benefits of half-hourly settlement if it is presented in an accessible way aligned to existing consumer support services.

#### **14. Do you have additional evidence which would help us refine the load shifting assumptions we have made in the Impact Assessment?**

We think Ofgem is right to look at a 'low to high range' to assess the benefits of load shifting, given the level of uncertainty. Decisions are yet to be taken on how we decarbonise heat and it's still uncertain what the take up of electric vehicles and smart energy controls might be - all of which would have a significant impact on the predicted figure<sup>14</sup>.

Within the impact assessment, it's not clear how the risk of market failures might affect the take up of smart tariffs. For example, the current lack of price comparison websites that compare these types of offers. Whilst the government is running an innovation competition to address some of these market failures<sup>15</sup>, it's important that the impact assessment acknowledges this risk and other similar risks.

The scope of this impact assessment includes small and microbusinesses but the data used to assess load shifting has primarily considered domestic consumers. The assumptions are less likely to be applicable to the wider target audience as a result. The analysis of distributional effects only includes consumers using smart tariffs and only considers domestic consumers.

It would be beneficial for Ofgem to actively seek the necessary data on microbusinesses if they are unable to identify it through this consultation process. Citizens Advice is unaware of any data collected on microbusinesses on load shifting from time of use tariffs, although previous qualitative research we completed identified different priorities between domestic and microbusiness consumers<sup>16</sup>. There is, of course, the results from trials such as the non-domestic smart energy management innovation competition<sup>17</sup> that may be of relevance.

Our research into communicating with microbusinesses highlights some of the challenges to improving their engagement with energy options<sup>18</sup>. The characteristics of

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<sup>14</sup> Citizens Advice, 2018, The value of the time of use tariffs

<sup>15</sup> BEIS, 2020, Funding for innovative smart energy systems

<sup>16</sup> Citizens Advice, 2019, EV smart charging: what is acceptable to drivers?

<sup>17</sup> BEIS, 2020, Non domestic smart energy management innovation competition

<sup>18</sup> Citizens Advice, 2020, Getting through to business

microbusinesses and the different regulatory requirements, relative to domestic consumers, should be reflected in an approach to help realise the benefits.

It's also unclear whether the impact assessment considers load shifting of exported electricity - something that may well be enabled by some of the options outlined in the impact assessment. This additional benefit may be harder to quantify given the limited exploration of tariffs that incentivise time of use export, however, there are some papers that have been published that indicate how time-varying price signals may affect prosumer behaviour<sup>19</sup>.

Many of the assessments of likely future uptake of electric vehicles, heat pumps and smart appliances are relatively old. There may be other more up to date figures that could be used<sup>20</sup> and more accurate future predictions that may come about based on new information. For example, how the decision on whether the government ends the sale of petrol, diesel, and hybrid cars by 2035 or earlier<sup>21</sup> could affect the speed of take-up.

Finally, it is worth the IA considering how much load shifting will be attributable to MHHS. The recently drafted Publicly Available Specification (PAS) 1878<sup>22</sup> on energy-smart appliances does not specify that smart meters or time of use tariffs will be the only route to load shifting. Rather, there could also be load shifting through the 'response mode' bypassing this system. Given there is relative uncertainty about how much loadshifting would be due to MHHS, we would hope Ofgem has treated the high and low estimations appropriately to account for this.

**15. Do you have any views on the issues regarding the consumer impacts following implementation of MHHS? Please refer to the standalone paper we have published for more detailed information.**

The number of consumers electively settled half hourly in January 2020 was less than 1% of metering points and this is likely to change significantly with marketwide half hourly settlement. The pace of this transition is also likely to be driven by the net zero target, increased costs of balancing the grid and electrification of heat and transport, as well as innovations in metering and settlement.

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<sup>19</sup> Klein et al., 2019, Aligning prosumers with the electricity wholesale market – The impact of time-varying price signals and fixed network charges on solar self-consumption

<sup>20</sup> National Grid ESO, 2020, Future energy scenarios 2020

<sup>21</sup> BEIS, 2020, Consultation on ending the sale of petrol, diesel, and hybrid cars and vans

<sup>22</sup> BSI, 2020 PAS 1878 - energy smart appliances



The net benefit of demand flexibility enabled by HHS will be determined by the number of consumers using this facility and the capacity they make available through their demand shifts. Given that more connections to the grid with predictable demand and the increased total demand that can be shifted are valuable to the electricity network, there should be clear guidance about encouraging consumers, where appropriate to the individual, to load shift. However, even with tariffs that only have upside rewards for behaviour change, peak shifting may cause vulnerable consumers undue concern and feel obligated to change their behaviour could have a detrimental impact<sup>23</sup>. As with smart meter marketing techniques, there is a need for clarity on how appropriate supplier encouragement can be achieved.

The IA states: *“The level of realisable benefits may depend on effective communication with consumers and how responsive they are to it... The scale of benefits that can be achieved from MHHS depends on successful rollout of smart meters, the levels of data available for settlement, and the market and consumer response. There is, in particular, significant uncertainty about the level of load shifting that is feasible.”* Yet given this risk, there is currently limited detail about the practical steps to realise positive consumer engagement.

The wide range of projected benefits from £1-4bn is large and a benefits realisation strategy for mitigating risks of consumer engagement can provide better credibility to these figures. It should include specific ways in which to protect consumer trust and engagement with changes to settlement and tariff changes.

As bills will go up for some consumers and down for others, the transition needs suitable protections that will be clear to consumers. This should include reducing consumer exposure to detriment from remaining on single rate tariffs as well as considering a range of ways to boost engagement with smart tariffs, particularly amongst those groups which already struggle to engage with their energy choices and those in vulnerable situations.

Groups that may be at risk of detriment include:

- Consumers settled using NHH once MHHS is implemented - including those who are unable to have a smart meter installed
- Consumers opting out of HHS and having a relatively larger group correction factor during peak time
- Consumers on single rate tariffs during MHHS if market focuses solely on delivering peak shifting incentives

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<sup>23</sup>Citizens Advice, 2019, Future for all: Making a future retail energy market work for everyone

- Consumers on smart tariffs with punitive peak pricing<sup>24</sup> - particularly vulnerable users with high electricity consumption and limited capacity to load shift<sup>25</sup>
- Microbusiness consumers - there is less information available on how these consumers may respond to ToU

In order to benefit from HHS, consumers need to complete the following tasks with or without additional support:

1. Understand what a smart tariff is
2. Recognise and predict a positive economic or environmental value proposition and potentially accept any downside risks
3. Agree contract
4. Accept half hourly data collection
5. Execute energy demand use behaviours
6. Be able to monitor the value they derive in comparison other tariffs
7. Be able to and willing to pay a potentially more volatile bill amounts
8. Seek access to support or redress if a smart tariff does not perform as promised

There are numerous reasons that a consumer might not be able to access price signals from static or dynamic time of use tariffs. These are outlined in detail our Future for all report<sup>26</sup>. Time of use tariffs will also enable consumer realisation of value from lifestyle products, energy efficiency and bundling of services. All of these provide potential consumer benefits but also further barriers to accessibility. These are considered further by Sovacool et al<sup>27</sup>.

Unlike the smart meter rollout which aims for a minimum of 80% adoption, the MHHS IA is estimating between 20 and 60% uptake of smart tariffs by 2045. Given the marketwide change in tariff offerings and shared costs of capacity and settlement reforms, we want to see efforts to improve easy access and protections for all consumers, including those that already struggle to engage with their energy.

This will require consumer understanding and confidence in half-hourly settlement and demand flexibility. As outlined in our report 'Future for All'<sup>28</sup>, low opt-in to ToU has been shown in the existing energy research literature. A 2015 survey showed that 30% of respondents were strongly or somewhat in favour of switching to a static ToU tariff, or

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<sup>24</sup> E.g. the live data on Octopus Agile shows while overall it is far lower than large supplier SVT, at times of high system demand there would be a major cost for those unable to load shift at 34p/KWh <https://twitter.com/energystatsuk/status/1297553468639641602?s=20>

<sup>25</sup> Citizens Advice, 2020, Understanding High and Low Electricity usage

<sup>26</sup> Citizens Advice, 2019, Future for all: Making a future retail energy market work for everyone

<sup>27</sup> Sovacool et al (2019) Temporality, vulnerability, and energy justice in household low carbon innovations, Energy Policy, Volume 128, May 2019, Pages 495-504

<sup>28</sup> Citizens Advice, 2019, Future for all: Making a future retail energy market work for everyone

to an automated dynamic ToU tariff. However, a systematised literature review from 2018 by the same 10 authors indicated that the proportion of bill payers who say they would be willing to switch to a ToU tariff in national surveys is five times higher than actual enrolment rate to ToU tariffs available. Our Future for all research found that consumers felt that ToU contracts should allow for changing consumer circumstances. Dynamic ToU would also require additional support for customers who cannot purchase smart appliances that can be controlled by a third party or load shifting tools such as batteries.

The engagement challenge and requirement for reduced risk increases because Ofgem's letter of preferred options for Access and Settlement Reform did not include small user access rights<sup>29</sup>. Although current Distribution Use of System charges do not target specific costs to specific low voltage consumer users, electricity suppliers do have the option of targeting distribution costs regionally. Analysis by Ofgem suggests that suppliers do pass on these costs on a regional basis. Also, smart meter functionality could be used to target use of system costs on an individual basis, and there are therefore questions around whether this would be desirable and acceptable, or whether alternative options should be explored. Ofgem's aforementioned letter pointed to a potential opportunity for consumer engagement with smart tariffs and the comparative difficulty of engagement to deliver a core or electricity service entitlement for small users. As a result, alongside MHHS, Ofgem "*expect the TCR to lead to an increase in wholesale market prices during peak periods*"<sup>30</sup> and make possible more targeted pricing. Yet there has been limited consideration about how consumers will be protected or supported to engage with their choices.

If the location, timing and purpose of our electricity use can vary its cost through settlement and access reforms it will encourage behaviour change in consumption patterns by passing on tailored price signals to consumers. However, not all consumers will find these signals accessible and those that do will be rewarded at the expense of those that can't unless the distributional impacts are proactively addressed.

### Transition protections

We have previously outlined transition principles which we maintain need protection to facilitate the adoption of smart tariffs:

- consumers can still switch suppliers, demand aggregators, and other energy service providers they may engage with;

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<sup>29</sup> Ofgem, 2020, Electricity Network Access and Forward-Looking Charging Review: Open Letter on our shortlisted policy options

<sup>30</sup> Ofgem, 2020, Electricity Network Access and Forward-Looking Charging Review: Open Letter on our shortlisted policy options

- consumers can switch to HHS or change their mind and switch back to NHHS without undue delay;
- consumers receive timely and transparent communication about what data is being collected, for what purposes and who has access to it;
- throughout the transition process, the privacy framework and the rights and preferences of consumers with regard to transparency and control of their data and how it is used are respected.
- Ofgem and suppliers will need to anticipate any likely shifts in bills and think through impacts on consumers in vulnerable circumstances. Lessons can be learnt here from the switch to metering in water and the implementation of P272;
- consumers do not suffer from bill shocks; and
- the impacts on consumers in vulnerable circumstances are given particular attention, particularly in relation to the distribution of costs.

Another proposal which would add value is ensuring widely available offers that protect against acute exposure to fluctuations in wholesale price variation. This could help build consumer confidence in TOU tariffs and introduce low risk options to enable consumers to experiment with load shifting. For example, the Irish regulator proposed a standard smart tariff to facilitate consumer engagement<sup>31</sup>.

Citizens Advice supports the current retail price caps being temporary. But we do not want them removed until we can be confident that the problems that led to their introduction will not simply re-emerge. We think that some form of enduring price protection is likely to be needed for vulnerable consumers after the wider cap is lifted. This protection should take account of any new risks that develop under MHHS.

### **The role of TPIs**

We welcome the recognition in the stand-alone Consumer Impacts paper of the central role that third-party intermediaries are likely to play in facilitating engagement with half-hourly settlement. The benefits are apparent as an extension of the function third-party intermediaries play in the current market, acting to reduce complexity and increase participation. However, consumers' perceptions of risk, given the complexity of offers involving load-shifting and external control of appliances, also present a barrier, which is exacerbated by a lack of consumer protections in this space. We expect TPIs to become even more prevalent in the next 5 years, playing an increasingly sophisticated role in delivering a net zero energy system. So the time to address this challenge is now.

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<sup>31</sup> Commission for regulation of Utilities, 2018, Smart Meter Upgrade

Recently completed research by Citizens Advice incorporated qualitative deliberative workshops<sup>32</sup> and face to face interviews with excluded groups where the concept of a “Smart TPI” was introduced that enabled consumers to benefit from fluctuating prices and third-party device control. This concept prompted a negative emotional reaction from participants with immediate concerns including data misuse and a perceived loss of control. Once the current system of TPI consumer protection was explained there was a consensus that consumer protection needs to be reviewed and strengthened. Furthermore, fewer participants were confident by the end of the workshop that current systems will be adequate for the next 10 years. There was also a general agreement that more complex models such as “Smart TPIs” would require more stringent regulation, with the greater direct control over aspects of consumer’s lives, the more protections required. This was supported by supplemental polling by Opinium with a representative sample of 1,793 bill payers in Great Britain, which showed a clear majority (64%) of respondents believed that new third-party services, that can manage devices energy use, should be regulated by Ofgem.

We combined these insights with legal analysis, polling and information from industry participants in our report *Stuck in the Middle*<sup>33</sup>, highlighting the gaps consumers face in consumer protection when engaging with TPIs. We advocated for such organisations to be brought within the direct sectoral remit of Ofgem. We consider this an essential step to build consumer confidence with emerging models of third-party intermediaries such as aggregators, and therefore for wider benefits of half-hourly settlement to be captured by domestic consumers.

There is also a broader question as to how all TPIs will engage with HHS - learnings from the BEIS smart meter-enabled tariffs comparison project<sup>34</sup> will be essential to incorporate - as will continued engagement with the industry through mechanisms such as the TPI forum.

## **Data sharing**

For consumers to meaningfully engage with their data choices, there needs to be an easy process for consumers to do so. Given the range of factors that a consumer may consider in deciding how they will be billed we advocate for the creation of a consumer-facing smart meter data dashboard as outlined in Question 13, alongside an up to date

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<sup>32</sup> Citizens Advice, 2020, Consumer attitudes to Third Party Intermediary Protection

<sup>33</sup> Citizens Advice, 2020, *Stuck in the middle*

<sup>34</sup> BEIS, 2019, Smart meter-enabled tariffs comparison project: Smarter Tariffs – Smarter Comparisons

source of information about what settlement reform and billing mean and why the change is happening.

We think Smart Energy GB, Citizens Advice, and other trusted intermediaries could have a role in enabling this approach to support positive consumer experiences through the transition. Citizens Advice is planning to deliver an online tool with the DCC, at the request of BEIS, that will allow consumers to check whether their smart meter is able to switch without losing smart functionality to help boost consumer understanding of the enrolment and adoption process. A similar tool for consumers that lets people review and change data sharing preferences would support a simple consumer journey that to actively engage with data choices and their energy choices. The IA and data privacy letter see the issue of communicating data changes as an isolated issue. We would encourage it to be part of a wider messaging about the benefits for the grid of better settlement and new forms of the tariff.

**16. Do you agree we have identified the right delivery functions to implement MHHS? We welcome your views.**

We agree with the proposed delivery functions.

**17. We have set out some possible options for the management of the delivery functions, and a proposal on how these would be funded. We welcome your views on this. Other**

Citizens Advice wants the chosen structure to have clear oversight and assurance from Ofgem and have clearly accountable governance and project management functions. A management function should have ownership of delivery with proven experience, technical knowledge and good industry engagement.

We believe that ELEXON is a well placed candidate for project management given its consistently strong performance in running the BSC and the commitment to run the program on a not-for-profit basis. Also Elexon, through modification P413, should be in a position to efficiently take on the responsibilities set out in Ofgem's consultation.

The REC, BSC and the SEC will each have an important role in ensuring that settlement, and specifically, the consumer experience of settlement through the REC and SEC, are delivered in a way consistent with existing and future governance objectives.

The funding mechanism through the BSC appears to be an appropriate method to enable the division of costs by industry parties.

**18. Do you have any comments on the Impact Assessment published alongside this document, or any additional evidence that you think we should take into account?**

No response provided.