techUK response to Ofgem

Consultation | Access to half-hourly electricity consumption data for settlement purposes

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techUK | Representing the future

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About techUK

techUK represents the companies and technologies that are defining today the world that we will live in tomorrow. The tech industry is creating jobs and growth across the UK. Over 950 companies are members of techUK. Collectively they employ more than 700,000 people, about half of all tech sector jobs in the UK. These companies range from leading FTSE 100 companies to new innovative start-ups. The majority of our members are small and medium sized businesses.

Summary

techUK welcomes the opportunity to respond to the Ofgem's consultation regarding half-hourly electricity consumption data for settlement purposes.

Using Half-Hourly (here onwards referred to as HH) data for settlement will place stronger incentives on suppliers to help customers move load to periods when electricity is cheapest. Using consumers' HH data, in conjunction with a faster process, can also improve the efficiency of market arrangements and promote competition by reducing the risks of entering the market.

If Ofgem is satisfied that settlement reform brings new and significant consumer and efficiency benefits to the electricity system as a whole (which we and Ofgem each expect), then customer half hourly data should be made available to the settlement system as a regulated requirement. The principle which under-pins the Data Access & Privacy Framework 2013 (and reinforced at EU level) is that consumers should have a choice over use of their data except where this data is needed for a regulated purpose. If there is a legal obligation on the party responsible for settlement to process HH electricity consumption data for settlement purposes only, then the data should be readily available in full to be processed for those reasons. We also want to stress that in our understanding "the party" are the Suppliers and their agents and shall there be any change in the future, techUK retains the right to re-consider our position.

techUK also wishes to raise the issue of anonymisation and 'hidden identity' in terms of Ofgem providing more information on the business case and the operational and set-up cost of such services. Moreover, Ofgem's Baringa report states that pseudonymisation is described by the ICO as carrying a "greater privacy risk (than anonymisation) but not necessarily an insurmountable one.

Of course, where cost effective, steps should be taken to minimise privacy impacts for customers, but, in our view, the proposed Option 2 for customer 'opt-out' puts at risk the longer-term potential benefits of settlement reform being fully realised for consumers at large and is likely to be at a high cost. As recognised by the consultation, an 'opt-out' approach arguably could lead to potential 'gaming' with some retailers (or customers) potentially taking unfair advantage of an electricity system only partly-settled against 'actual' energy usage.

In coming to its decision in favour of Option 2, Ofgem draws on focus group findings from its Consumer First Panel (~60 customers in total) – plus a short Omnibus survey of ~1500 respondents. However, in none of this sampling was the question raised as to how much those who wished to opt out would be willing to pay for not being settled using HH data, but an approximate estimate. Given the nature of the use of the data, it would be unreasonable to socialise the cost across other customers, making the vast majority pay both for a service they did not choose and through a reduction in the efficiency of the energy system as a whole. We are extremely mindful of the importance of privacy issues to consumers, but we nonetheless believe that the likely long-run benefits from successful settlement reform, including for consumers overall, will warrant a mandated approach to collecting customer half-hourly consumption data for settlement (Option 3), with a view that options 4a and 4b are just not economical nor fitting within the government's aspiration to reduce energy costs. Simply implementing those options will be extremely costly and that cost most likely will be spread across all consumer groups. Ofgem should evaluate carefully if such options are even necessary as in our opinion not entirely. We would also like to question how much would a consumer have to pay not to be settled using HH data and how will their supplier communicate the information to them? Would then those consumers choose the option? How would that affect faster switching and costs for the Suppliers as there will be some customers who are not settled. We strongly recommend that costs are not socialised.

Absent other relevant evidence (on international experience, for example), such research can offer helpful insight into customer thinking, but customer data-privacy and electricity settlement reform are unquestionably complex topics for consumer research. In arriving at fundamental decisions about the future shape and desired outcomes for settlement reform, customer research should be treated as just one among several relevant inputs.

Mandation would also address the potential for gaming. A mandated approach to accessing customer data for settlement purposes may in the end prove fairer overall, subject to a good understanding of the likely distributional impacts for end-customers of greater cost-reflection in under-lying industry charges from settlement reform – especially for energy consumers in vulnerable circumstances. It will be important to explore this topic in the economic case in the half-hourly settlement Business case.

We recognise there are questions regarding consent arrangements for access to data for settlement purposes for the ~6 million customers who already have an electricity smart meter (i.e. foundation or SMETS 1 meters). Even so, Ofgem's proposal for this customer group to retain the existing 'opt in' arrangements until they change either their tariff or their supplier seems out of step with achieving successful settlement reform and arguably disproportionate.

Furthermore, techUK encourages innovations and technological advances such as smart appliances, electric vehicles with smart charging, and batteries, which should enhance

consumers' ability to adapt their consumption in response to price signals. We have the view that data should be available for suppliers to be able to provide one service to all and innovate within their organisation appropriately with new offers and lower energy prices.

We provide answers to the individual questions in Response section of this document.

Response

1. What are your views on Ofgem's assessment of the implications of the options we have set out for access to HH electricity consumption data for settlement?

The installation of smart and advanced meters will enable customers to be settled based on actual HH consumption, rather than using estimated consumption profiles as it has been until now. It is clear that option 3 provides the maximum benefit to consumers as it maximises the benefits of smart meter data. Our logic is simply that system settlement is a regulated activity and should be treated as such for access to customer meter data.

Ofgem has stated that without the demand shift and reduction associated with wider supplier exposure to the costs of supply, decarbonising the GB energy system, integrating EVs and maintaining the networks will be considerably more expensive. Therefore, without HHS or where consumers do not opt to share HH data, societal harm emerges in the form of a financial and environmental loss relative to a counterfactual scenario with market-wide HHS and sufficient numbers of consumers sharing their HH data for settlement purposes. Where extra costs will be spread to the consumers, this increases the harm.

Given that allowing customers to opt out will be to the detriment of those who choose not to, it is clear the Ofgem should not socialise the cost of any of the other options. As the costs are likely to be very high and the numbers choosing to opt out relatively small, the individual cost could be very substantial, potentially as high or higher than their total electricity bill. It is disappointing that Ofgem has not conducted any research into the willingness of customers to pay to prevent their data being used for settlement, whilst still accepting a Smart Meter.

Before proceeding with any option other than option 3, Ofgem should ensure that they have solid data that there are sufficient customers willing to pay large amounts to keep their data from use in Settlement. techUK thinks that as the majority of consumers do not understand the different roles within the energy system it is unlikely and would see these as similar issues i.e. industry players needing data for a 'regulated' purpose to ensure that we have an efficient energy system and ultimately make the provision economically viable by Suppliers of products that help keep the lights on as more renewables are connected to the system. We wouldn't want to confuse the consumer as to what their data is exactly used for and to make it clear from the start that HH data is only used under this regulation for settlement purposes and their data is automatically protected from being used for other purposes such as billing or marketing. This must be made clear so as to also not hinder the customer's

decision to accept a smart meter. Or otherwise informed what the cost for them and them only will be in the case they actively choose not to have one, essentially not being settled properly every half hour rather than socialising such costs across all consumers.

2. Do you agree with Ofgem's current view that the best balance could be achieved by a legal obligation to process HH electricity consumption data for settlement provided the consumer has not opted out, and if so, why? If you have a different view, please explain which option you would prefer and the reasons for this.

Not entirely. We believe that mandating the provision of HH data for settlement is the correct option, together with a legal obligation to process HH electricity consumption data in all circumstances. We do not believe there is evidence that consumers would be prepared to pay to restrict the data, and that socialising the cost would put unfair burden on the majority of consumers, creating further problems of fuel poverty and lack of competitiveness for industry.

Mandating Suppliers to process half hourly data for settlement and making that data readily available is a much better solution.

Allowing for opt-out risks gaming by suppliers who would (1) want to avoid customers with high peak usage being half-hourly settled or (2) cherry-picking customers with low peak-usage. Similarly, individual customers with high peak usage risk being more likely to opt out (even if there was not an immediate price impact it is clear from Ofgem's consumer research that fear of price increases is a reason for customers having concerns about sharing their data). This will undermine the system benefits from HHS to the detriment of consumers at large. Allowing for optout is a disproportionate response to consumer concerns about the sharing of data.

In our view there is a clear case for mandating use of data for settlement.

While we recognise that Ofgem's consumer panel supported "opt out" as a sensible middle path, this was without giving them information on the high costs of such a decision. it is beholden on Ofgem to do a fuller analysis of the impacts on the system of allowing opt out given the risk identified in question 3. While some customers are concerned about sharing their data it is clear (e.g. from Ofgem's omnibus survey) that for almost all customers this data is seen as much less sensitive than other data such as health or financial data for example, and that settlement is a legitimate use. As such Ofgem should not put at risk the wider consumer and system efficiency benefits of settlement reform by shaping the future data access arrangements around an anticipated small number of customers who may retain significant concerns. Instead, Ofgem's focus should be on how best to design the settlement system reform to minimise the privacy impacts within the chosen approach.

3. There is a risk that consumers who use particularly high volumes of electricity at peak could choose not to be HH settled and therefore disproportionately increase energy system costs,

which would then be shared by all consumers. Do you have any views on whether or how we should address this issue?

We agree this is a real concern and is the reason why we are advocating a mandated approach - for reasons of fairness overall.

4. What are your views on the potential enhanced privacy options?

Identifying ways to enhance privacy where this can be done without significant cost and materially impacting the benefits of the data would clearly be worth exploring, however only if it was likely that it could be implemented at a reasonable cost. We do not believe that given the likely very high cost of these options, they are the best way to protect against misuse by industry parties of the data.

We also agree with Ofgem that the existing safeguards provide suitable protection to the privacy rights of consumers under all access to HH data options under consideration.

Different options were explored during the development of the Data Access and Privacy Framework in 2012, and at that point a range of technical options were advocated by academics, Microsoft and others. We believe that greater exploration of these options between Ofgem, Baringa and the DCC (Smart Data Communications Company) is important.

We believe that Ofgem must not socialise costs associated with setting-up options 4a or 4b and require a fully developed plan on how that might be done and how data will be processed. We want to ask Ofgem to provide more evidence on these approaches and potentially liaise with other government departments such as the Department for Digital, Culture Media and Sport and their efforts in the creation of the Centre for Data Ethics and Innovation. The work of the Centre in this area should seek to encourage and enable the design, development and take up of innovative technical solutions to ethical challenges as well as removing potential barriers that could prevent or stifle the development of data and Al innovation in the UK. If consumers are overly sensitive on their consumption or export data, which is shown to not entirely be the case in Ofgem's consumer views report, they may take personal comfort in the knowledge of such centre guiding and advising in Ofgem's decision making on data protection. The Centre will be an independent advisor to government on the measures that may be needed for the UK to become a world leader in ethical and responsible AI and data innovation. This will also encourage the different stakeholders in the sector to be able to innovate and use data for other purposes, such as more flexible tariffs and/or research.

5. If we decided to further consider the hidden identity option, do you think data from all consumers should be pseudonymised or only data from consumers who have not chosen to share their HH data for settlement?

In our opinion that would be extremely costly, and we need more evidence of the associated cost to pursue such an option. Furthermore, there is a risk that this may result in

poorer consumer service from the Supplier or their agents because of issues of correlating data with the customer.

Providing the pseudonymised service to all consumers would make it harder to justify the non-socialisation of the costs, which potentially would add further burden on consumers who do not see the need, with the resultant increase in harm that higher prices incur. techUK is under the impression that in any case if option 3 is to be pursued, under the text of the regulation consumers' data will be anyway protected and not used for any other purposes but settlement anyhow. Breach of these rules would be very serious for any company involved, and Ofgem needs to ensure it has adequate enforcement mechanisms in place.

- 6. Please provide any information you can about the likely costs and benefits of these options. We do not have any specific costs for these options, but believe other than option 3, they are likely to all be substantial and unlikely to reflect the benefit for the few customers who would wish to use the option.
- 7. Do you think that there should be a legal obligation to process HH data from all smart and advance metered microbusiness customers for settlement purposes only? If you disagree, please explain why.

This makes sense given that as Ofgem note the privacy concerns will be less and the system benefits greater than for domestic customers, but again data must be obtained and readily available in full.

8. Are there any issues relating to access to data from microbusinesses that you think Ofgem should be aware of?

In general, it is worth remembering that the concerns for businesses can be as much about commercial confidentiality as privacy per se.

9. We propose that domestic and microbusiness consumers retain the level of control over sharing their HH electricity consumption data that was communicated to them at the point at which they accepted a smart or advanced meter, until the point at which the consumer decides to change electricity contract. Do you agree this is the best approach?

No. There does not seem to be any necessity to go down this path. It is common for changes to terms and conditions to be made during the life of an energy contract, where the regulatory framework changes. This is not a "retrospective" change as it would only apply to data collected (or relating to) a future date.

Moreover, we know that many customers rarely engage in the energy market and hence could remain on their current 'opt-in' terms with their supplier for many, many years. Furthermore, these disengaged customers are the least likely to opt-in which means the benefits of HHS will be severely undermined.

We recognise that there is an issue that some customers may have only accepted a smart meter on the basis that they were able to limit the amount of data that was collected. For such customers allowing an opt-out until such time as they change tariff or supplier could be a way forward. The argument that they might not read a notice informing them of the

change of terms is a very weak one as the basis for policy making. Having a single cut-over point would allow for more effective communication by Ofgem and consumer groups if there were a concern that it might be overlooked.

10. What are your views on Ofgem's proposal to make aggregated HH electricity consumption data broken down by supplier, GSP group, and metering system categorisation available for forecasting?

We recognise that suppliers have a need for data for forecasting and that more granular data is likely to support better forecasting which will be of increased importance in an HHS world – and that some suppliers are arguing for smaller geographic areas. We note the point raised by Ofgem about small suppliers where GSP level data by meter system could lead to small customer numbers potentially allowing customer re-identification.

As an alternative (or in addition) we would strongly urge Ofgem to look at making market-level aggregated data publicly available at a suitable level of geographic disaggregation (such as a street or Lower Super Output Area – LSOA). This could allow more granular data than GSP to be provided and could address the small supplier issue. Moreover, it would help open the market to a wider range of players and potential entrants who may be looking to assess the market opportunities.

There is an argument that such data should be the most that suppliers can expect to get on a mandated basis – and that if they also wish for supplier-specific data (to help better manage their costs), then they should find a way to share the benefits with their customers and obtain consent. While we recognise that Ofgem's focus here is on settlement, we also note that such an approach - of providing market-level data - could also deliver wider public policy benefit.

11. Is there any additional data beyond this aggregated data that you consider suppliers will need for forecasting?

Yes, Suppliers are going to need a large amount of additional information to assist with forecasting that enables the data to be aggregated against the profile of their target customers.

12. Our analysis suggests that HH export data reveals less about a consumer and is therefore likely to be of less concern to consumers than HH electricity consumption data. Do you agree?

Yes, although where what is being provided is net data, the consumption data could probably be deduced if the likely gross generation data could be estimated, – and we welcome the inclusion of export data in this debate as it is clearly critical to having an effective HHS system. For electricity system efficiency and for reasons of fairness in allocating industry charges in the future, it will be important for the system to be settled based on actual customer export as well as actual import.

- 13. Do you consider that any additional regulatory clarity may be needed with respect to the legal basis for processing HH export data from smart and advanced meters for settlement? It is not clear that any additional regulatory clarity is needed. It is clear that export data does fall within the current scope of the DAPF. It is also clear that use of HH data for settlement under GDPR does not require customer consent. We understand that BEIS are anyway looking to provide additional guidance around the interplay of the DAPF and GDPR. If any additional clarity is needed it may best be done through that route.
- 14. Do you have any thoughts on the monitoring/auditing environment for the use of HH data for settlement purposes?

For all cases an auditing policy must be created or repurposed to make sure suppliers and their agents aren't using the data for other purposes but settlement, together with a process to handle consumers who are concerned their data is being misused.

15. Do you have any additional thoughts or questions about the content of the DPIA?

In summary we believe that Option 3 is the obvious choice, and that the provision of enhance privacy for data used in Settlement is far too costly and of very little value to consumers. There is no evidence that this is a service that consumers would be willing to pay for. Ofgem needs to be much stronger in seeking ways to reduce the cost of energy to UK consumers, for instance by improving the efficiency of the system, not by adding further layers of complication.