

# Consumer Futures

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Ben Smithers

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Dear Ben,

## Consumer Futures response to Ofgem consultation: Creating the right environment for demand-side response

We are pleased to have the opportunity to respond to this consultation. We agree with your initial conclusion that current arrangements do not meet the preconditions for the longer-term development of demand-side response (DSR), and that many of the key challenges that you identify are important. We note that there is little focus in this consultation on the mechanics and details of consumer engagement and protection, which we think are vital. While we understand that these will be picked up under the Smarter Markets work on Consumer Empowerment and Protection, it is essential that this is also recognised fully within the priorities for the DSR work in the Smarter Markets team. Ultimately the success or failure of DSR will rest on customers' willingness and ability to engage effectively.

Consumer Futures (previously as Consumer Focus) has long argued for a distributional impact assessment of DSR tariffs. We are pleased to learn that work is underway on this. It is essential that any impact assessment considers fuel poor consumers and those in vulnerable positions not as a homogeneous group, but rather recognises the differential impacts of factors such as rurality, dwelling type and tenure, heating system, family situation and payment method. We are pleased also to see that LCNF projects focussing on consumer engagement appear to be coming forward; however, we would urge Ofgem to encourage further trials which focus explicitly on the effect of demand side response tariffs on different consumer segments, particularly those in vulnerable positions.

This response is not confidential and may be displayed on your website.

### Responses to questions

#### **1: Are there any additional key challenges associated with revealing the value of demand-side response across the system? If so, please identify and explain these challenges.**

Yes, there are additional key challenges. Perhaps the most important is that there is a lack of clarity over how to evaluate the potential benefits of demand side response, in the first place. As we discussed in our recent paper *Smart Grids*:

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*Future-proofed for consumers?* figures for the value of DSR, and methods for calculating it, vary considerably between publications from DECC; figures calculated by researchers at Imperial College and presented more than once at Ofgem events are themselves very different to any coming from DECC publications. In addition, very little appears to have been done by anyone so far to investigate or measure the costs of demand side response, and in some calculations of its value, the costs are not included at all.

It is likely to be considerably more difficult to reveal the value of DSR across the system without consensus over how to calculate what the value might be, within government and between government and the regulator. We would therefore suggest, as suggested also in our recent smart grids paper, that a framework for the evaluation of demand side response, including some estimation of the likely costs to different parties, is developed in the way that such a framework was developed for smart grids.

### **2: Can current regulatory and commercial arrangements provide the means to secure demand-side response being delivered? If not, what will regulatory and commercial arrangements need to deliver in the future?**

No, current arrangements do not provide the means to secure demand side response being delivered. As discussed in section 3.25 there is a need for a means of monitoring and verification to ensure that DSR is in fact provided by those from whom it is contracted.

In addition, there is currently no regulation around the use of automation for demand side response. Automation may play a key role in securing DSR, but without regulation covering consumer protection, privacy, issues around over-ride capabilities etc, it may be difficult for it to become widespread.

### **3: Is current work on improving clarity around interactions between industry parties sufficient? If not, what further work is needed to provide this clarity?**

It is not clear to us that current work is far-reaching or detailed enough on this subject. As far as we understand there has been no overarching investigation into the likely extent to which different industry parties will have convergent, or divergent, interests with respect to demand side response, although there is discussion in various fora about the fact that both are possible.

There is also insufficient investigation of what the effects or outcomes of interactions between industry parties, particularly where their interests are divergent, might be. For instance it may be the case that in the majority of cases in which a supplier and a network require different things from demand side response, the supplier will 'win', because network charges make up a much smaller proportion of consumers' bills so their signals will not be as pronounced. In particular, we would call for some modelling of the effects of industry party interactions on consumers themselves.

We are somewhat concerned and bemused that table 3 in the consultation document does not discuss generators. Demand side response actions taken by consumers in reaction to signals from networks could result in generators (particularly inflexible ones such as wind) being curtailed because there is not sufficient demand to use the generation available. Conversely, demand side response called on by generators (for instance during a high-wind event) could have impacts on future reinforcement costs for networks, and, particularly for unpredictable events, on imbalance costs for suppliers in the case of half-hourly metered customers.

**4: Are there any additional key challenges associated with effectively signalling the value of demand-side response to consumers? If so, please identify and explain these challenges.**

A challenge which does not seem to be discussed here is that of the manner in which signals are delivered to customers. Even if DSR signals themselves are improved through relating them more closely to the times or locations when DSR has the most value, if they are not communicated to consumers in ways in which they understand and are able to act upon, they will not have the desired effect.

A separate challenge related to DSR signals (although not, perhaps, strictly related to effective signalling in the sense meant in this consultation) is their relation to other incentives put on consumers by government policy. Consumer Futures fully understands that differential and time of use network charges may be important to encourage consumers to buy products which cause less strain on the network, and to try to use them at off-peak times whenever possible. However, there is a danger that while government will be trying to encourage consumers to buy electric vehicles, install heat pumps and onsite generation through subsidies, networks could appear to be trying to discourage this through their charging structures. This may be an issue on which Ofgem and distribution networks need to engage with DECC to ensure a consistent set of messages are provided to consumers of all types.

**5: Do you agree that signals to customers need to improve in order for customers to realise the full value of demand-side response? Does improving these signals require incremental adaptation of current arrangements, or a new set of arrangements?**

We fully agree that signals to customers need to improve in order for them to realise the full value of demand-side response – current signals make it difficult even for a small proportion of the value to be realised.

It is not yet clear to us whether incremental adaptation of current arrangements can bring about sufficient improvement of these signals, or not.

### **6: To what extent can current or new arrangements better accommodate cross-party impacts resulting from the use of demand-side response?**

We would argue that new arrangements to accommodate cross-party impacts should be developed strategically so as to favour those uses of demand side response which will have the greatest effect in reducing consumer bills, and reducing the carbon emissions from our electricity system. It is not clear that the market will necessarily bring the best outcome for consumers or for the UK's carbon targets.

### **7: Are there any additional key challenges associated with customer awareness and access to opportunities around demand-side response? If so please identify and explain these challenges.**

We feel that the three 'key challenges' listed in 3.68 could more accurately be described as conditions for consumer participation in the DSR market, with a number of challenges associated with bringing each of them about. Many of what we would consider to be these challenges are discussed in the consultation document from 3.68 onwards. However, we would add some further challenges:

- Consumers must not only be made aware of opportunities presented by DSR, they must be made aware in ways that they can understand, so that they are able to act on the information they are made aware of.
- We would agree that industry, and third parties, will be instrumental in informing consumers of the opportunities presented by DSR. However, in order that consumers are best able to take in and use that information, it is imperative that industry first tackle the issue of a widespread lack of consumer trust.
- Similarly, it is imperative that the widespread apathy of domestic consumers with respect to the electricity market, evidenced by low switching rates, is also tackled.
- One element in tackling this lack of trust and, potentially, apathy, is to ensure a well-functioning, competitive market that serves the needs of all consumers. This, combined with effective network price controls, should mean that consumers are appropriately compensated for the value of the DSR that they provide, so that it is clear what is 'in it' for them to participate.
- In order for consumers to access opportunities and act to take up a particular option, they may need new equipment, as discussed briefly in section 3.82 of the consultation. In the domestic sphere, the particular challenge is ensuring that all consumers have access to opportunities to participate, regardless of income, and that the cost of any new equipment is not a barrier to participation.

### **8: Is any additional work needed to explore the role of third parties in helping customers to access and assess demand-side response offerings?**

Yes, we would argue that additional work may be necessary.

There is an expectation that comparison sites and energy service companies (ESCos) will in the future provide enhanced services to domestic consumers, in conjunction with data available from smart meters, to help them choose the best tariff. However, currently, it remains to be seen whether and how these enhanced services will emerge, and whether consumers will in fact trust and use them. A recent OFT report<sup>1</sup> found that there are a number of issues around the quality of, and consumer trust in, current comparison sites across a range of sectors. This included issues of transparency about the nature of the organisations providing the comparison, and whether the comparisons they provide are wholly objective. These issues must be dealt with if we expect these sites to evolve to be able to provide services that allow consumers to participate effectively in DSR.

In addition, as we argued in our recent paper on smart grids, while it should be possible for a comparison site or ESCo to use a consumer's energy use data to help them to choose a more complex static tariff, it is unclear how they could do this for a dynamic tariff, which is by its nature unpredictable. Therefore, further exploration into how a third party could help consumers to compare dynamic tariffs, and predict potential future bills – if indeed this is possible – is vital if we wish consumers to make the right choices for themselves, and to be able to participate as far as possible in demand response.

In relation to this, as we have discussed elsewhere, if third parties are to be able to help customers in the way that is expected, further work will be needed to ensure that consumers can access their half-hourly data in a portable and comparable format. We understand that in theory, once the smart metering Data Communications Company is set up, consumers will be able to access their data via their supplier, directly from their meter through a consumer access device via the Home Area Network (HAN), or via a third party. However, it is unclear whether all consumers will in fact have access via the latter two routes, since an estimated 2 million consumers may receive SMETS1 meters, for which there is to be no obligation to enrol in the DCC, and it is unclear whether the HAN for SMETS1 meters will be suitable for the required data access. It is vital that all consumers' access to their own data, in sufficient granularity and in a timely manner, is prioritised if third parties are to play the hoped-for role in helping consumers to access and assess DSR offerings.

As well as this, further work is necessary to understand how the role of aggregators may evolve in the future, particularly with respect to whether and how they might begin to offer services to domestic and smaller business consumers.

**9: Are there additional preconditions for delivering the right environment for demand-side response? If so, please explain what these are and why they are important, as well as attaching a priority relative to those challenges we have already identified.**

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<sup>1</sup> Office of Fair Trading (2012) *Price Comparison Websites: Trust, choice and consumer empowerment in online markets*

Yes, we feel there are additional preconditions to those discussed in the consultation.

As discussed in our answer to question 1, a precondition to ensuring that parties are confident that there is value in demand side response, is gaining more clarity on what that value might be, and where it may lie.

A further key issue is the role that DSR is given in reforms to the electricity market, and particularly within the capacity mechanism. It is not yet clear that the design of the capacity mechanism will stimulate DSR as much as it might, particularly in the domestic sphere. We would suggest that a policy framework which enables full participation of DSR in the market is as important as any of the preconditions discussed in this consultation. We appreciate, however, that government policy is out of Ofgem's control.

A final precondition seems to be better joined-up working between government and the regulator in this area, including around incentives for uptake of electric low carbon technologies vs. encouraging consumers to put as little strain on networks as possible. We would argue that co-ordination between government and the regulator will be vital in creating a clear set of incentives for consumers, and minimising confusion around a complex set of issues.

**10: Do you agree with the priority and timing we have attached to addressing each of the key challenges identified above?**

Yes, broadly, we do. As discussed, we feel that greater focus and co-ordination may be needed on related work on consumer engagement and protection, and await further outputs from the Consumer Empowerment and Protection stream of the Smarter Markets work.

Yours sincerely,

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