



ESB Networks – Response to CER/15/272 – Empowering and Protecting Customers

Dear Sir/Madam,

ESB Networks would like to take this opportunity to further engage with the National Smart Metering Programme. We view this programme as a valuable and far-reaching opportunity for the Irish Energy Customer. We strongly support, and it is our ambition to enable, the programme's key objectives, namely:

- Encourage Energy Efficiency
- Facilitate Peak Load Management
- Support Renewable and Micro Generation
- Enhance Competition and Improve Customer Service
- Improve Network Services

In doing so we believe the customer can expect:

- *Accuracy* in their bills. No more estimates.
- *Choice* in a retail market. Flexibility to select the product that's right for them and to receive information in a manner that suits them
- *Control* of how they choose to consume and how to spend their money

In order for this consultation to be a success, a clear set of minimum standard, mandated pro-customer outcomes should be clearly identified and coherently linked to an appropriate segmented and economically advantageous customer journey.

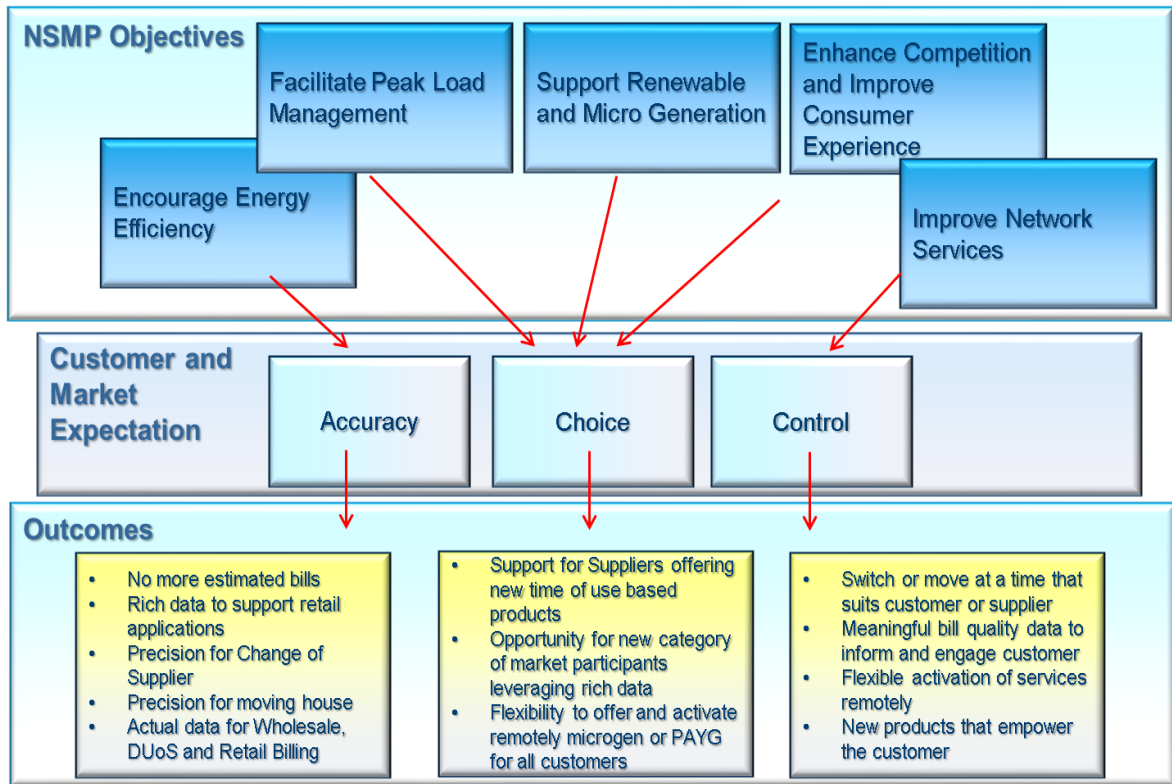


Figure 1. A Outcome-Based View of the Programme

Question 1

The HDF is intended to serve a longer term view of a customer's energy consumption (up to two years). We do not believe there is a need at this time to specify, nor do we believe it beneficial to make determinations such as "updates be made within 24 hours". The commission should reserve judgement until such a time as the overall role the HDF will eventually play has been appropriately established.

We believe "best endeavours" should be made to make the HDF available to customers within a reasonable timeframe within the working week, and that the data should possess at least, the most recently completed valid bill period (the 2 year overall period still applying).

The nature of the file is intended to show 2 years worth of data, if the requirement of the user is for very recent data (i.e. within last 24 hours) then we suggest that the HDF is not being used for



its intended purpose and the customer should be supported to understand where in-month billing data is best sourced.

The demand and usage of the HDF is not quantified (there not be any demand), and requiring, at this point, an onerous technically ambitious solution will serve to act to the detriment of the overall solution and add implementation risk.

The programme is best served to focus on delivering a stable wholesale market, data collection and aggregation systems and smart market services; and leverage these, once implemented to derive this HDF service for the customers who want it.

Question 2

The proposed decision is based on information and assumptions from a previous decade.

Since then, the Programme itself has moved on a number of areas, in particular:

- The prevailing usage of interval data from source all the way to settlement and Use of System Billing
- Thin Pay-As-You-Go model designed
- The requirement for an agile end-end service that can respond such that customer balance calculations and top ups response are among best-in-class internationally (and thus implicates the performance of the overall Solution)
- Varying TOU based products (no one single National TOU, but a consistent yet varied range of products)

None of these were key design principles agreed or even discussed when the July 2012 decision was made, which forms the thread linking the original Behaviour Trial to the current proposed decision.

The technology roadmaps for consumer electronics and the emergence of ecosystems for home energy management applications (none of which require a DSO supported service) aside; the kinds of outcomes and experiences envisaged through the NSMP that the current design can account for were not even conceived at the time.

So, in 2016, when we study what is the appropriate investment for the minimum service that each household should receive (and still provide a return on the investment), **we believe a modified Option D2, is the only appropriate minimum mandate.**

As with our response to CER/15/137, we emphatically believe at this point that Option D2 represents the strongest platform to engage customers and thus maximise benefit realisation for all customers.

We propose that CER's Option D2 best aligns with the High Level Strategic Model for Customer Engagement and Benefits Realisation; a model which recognises not all customers are the same; that the same information presented to two different customer categories can have different (not positive) results.

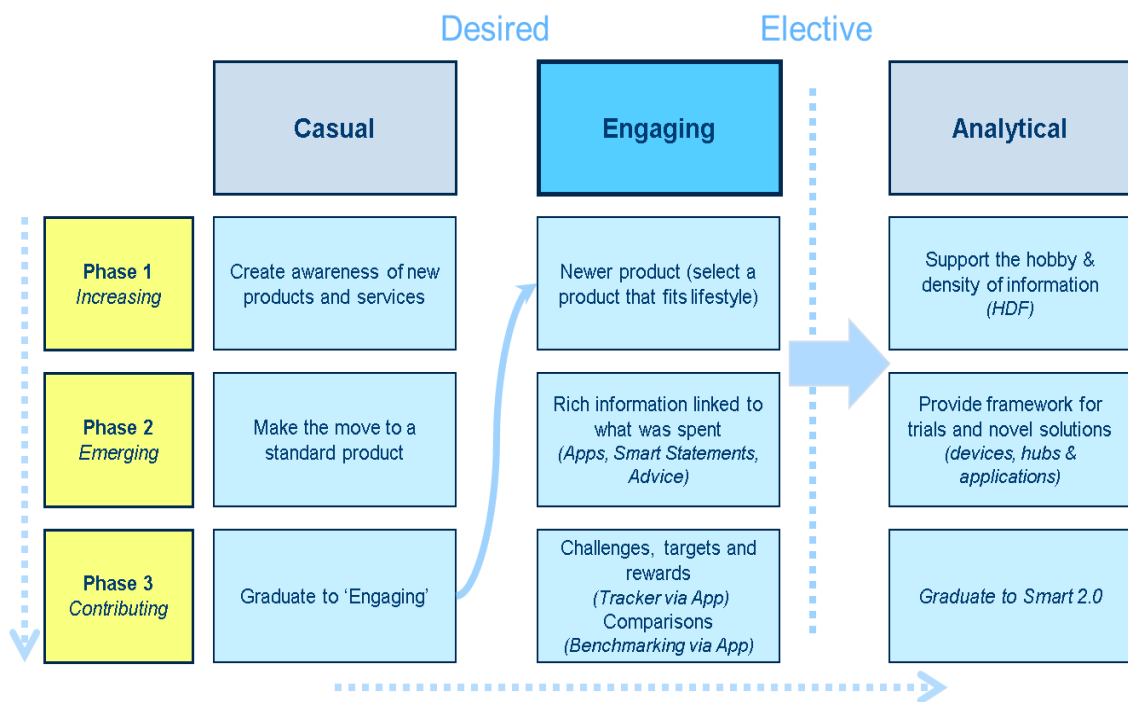


Figure 2. Modified Option D2 with High Level Strategy



Why do we believe this?

We know from our own Irish trial and other studies elsewhere that customers in receipt of granular data, monthly bills and time-based products will exhibit statistically relevant behaviour change. This in itself is sufficient to determine the minimum mandate for each household.

The minimum standard for all market participants is to deliver systems that can receive and process data from ESB Networks on a daily basis. The requirements alone to deliver CER's Thin PAYG requirements infer that just by delivering the NSMP retail market components (the unavoidable CAPEX), we are positioned to leverage this. So where is the benefit in incremental Programme costs, in particular when there is unjustifiable or unquantifiable return?

In the US, Opower has demonstrated outcomes of 3-5% reduction in peak through analytics of customers' D+1 data and engaging appropriately with customers (source: Opower and Transmission and Distribution World Jan 13 2016). Also in the US, the DoE has come through a review and determined in its 2015 CBS Interim Report, that "offerings without IHDs were more cost-effective for the utility in all cases than those with IHDs".

We believe the minimum mandate should be outcome focused and something which all customers can avail of - **D+1 data presented in a meaningful way achieves this.**

In determining that there should be a HAN supported by the DSO and therefore devices and associated services supported by the DSO, you are committing the DSO to spend CAPEX and incur enduring OPEX in households that have no need or interest in such services.

Mandating a DSO supported HAN also increases the risk profile of the overall solution from an overall security point of view, given that a new "channel of attack" will now be present in every home. The demand for and return on investment on, a DSO supported HAN should consider the considerable increment on the security risks being introduced to the electricity distribution system. Customer and market driven applications would not share this risk given the lack of integration with the DSO's infrastructure.

Furthermore, there will be a substantial proportion of the end-user population who due to meter location, dwelling type, construction type, or natural phenomena will never be suitable candidates for a HAN supported via the DSO meter (this is estimated to be 1 in 5 homes). Is it right that these users are being asked to subsidise a capital component of the solution, and a potentially very significant opex component that they cannot avail of (and even then, we do not know what demand if any will exist for the remaining users).

The solution should be to allow the market to serve those who desire a service. We see with the proliferation of new home energy management applications (Nest, Hive etc.) that products and services will find their audience who will in turn engage. One size does not fit all and to

infer the optimal route to deliver niche products and services is to mandate the DSO to source and support for all households is perhaps misguided, and risks the stated ambitions being unrealised.

Lastly, we must challenge the assertion in the proposal that there is seemingly no DSO (and therefore no DUoS) implication as this is a “supplier service”. Simply put, this proposal represents a riskier proposal than the initial July 2012 or Oct 2014 positions for the End User.

What is implicated in this proposal from the Commission is that DSO will source and support the enabling components and services for all homes. In addition, there will be a “backstop” device, of unquantified and unspecified demand.

This model suggests that ESB Networks commits its full resources to developing, deploying and supporting a technology that will be obsolete before if it is even procured. We will specify in 2016 a fixed unmovable standard, based on a 2009 idea, to give to a customer in 2020 to be implemented in every household, irrespective of whether it is desired, or of benefit. This represents tremendous risk and will not be of use to Market participants who will want to source solutions integrated into their own propositions, and not one subject to DSO-imposed constraints.

The DSO is also thus tasked with acquiring an unquantified number of IHD’s for an unquantified demand and to retain these devices on standby should a Supplier decide they might choose to avail of it. The DSO will need to have a speculative national deployment and national support service resourced and in place, for an unquantified demand. The proposed model suggests some form of Transactional charge – that the DSO will get paid back at some point on a per-device basis.

We believe there is significant engagement required to progress our understanding of how this model could be delivered and how it could be successfully funded.

The manner in which the proposal is framed creates “competition” for the DSO service and therefore suggests inherent reduced demand for any “backstop”. Suppliers will seek to deliver their own solutions integrated with the retail propositions that they can integrate and control and thus deliver a more predictable, stable and therefore better customer experience.

ESB Network’s final comment on this, is that we propose that as the DSO, and the participant with the significant share of enabling solution components to deliver; that we seek to maximise opportunity for additional services through the market engagement, and we allow that market engagement to inform what is appropriate for the minimum set of outcomes for each household in Ireland rather than predetermining the mode of delivery (in this case through a model that is outmoded and will not deliver the intended outcome).



Question 5

ESB Networks believes this area has not received as much discussion in Industry as is it could have. There are some issues which require further debate and consideration before any proposal can be finalised.

We believe this decision is in contravention of the overall programme objective to “Improve Networks Services”. We believe that this proposal cannot save opex, but in fact will create additional opex given the intricacies, redundancies and duplication of effort being introduced into the market processes and the resourcing and manual intervention to deliver these. The integrity of how the retail market operates is compromised as are the customer’s rights.

Currently there is agreement between the customer and the Supplier as to the outcome of the site visit (i.e. there will be a de-energisation) as the DSO is in receipt of a request to carry out a command from the Supplier and travels to execute. The DSO possess no mandate or information to negotiate on site. The DSO assesses a very narrow range of considerations on site.

In the proposal: The DSO is being effectively asked to carry out a site visit to assess whether the customer should be de-energised. This infers that the DSO is being tasked with making representations on behalf of the Supplier to debate the customers position. What are the data protection and general privacy implications for this? There is no scope in current regulations nor does ESB Networks wish to allow our staff to act as debt collection negotiators determining whether a customer does or does not meet criteria set by others.

We believe that the Commission in spirit, is striving to protect customers, which we whole heartedly agree with; however, we feel the execution of the proposal as outlined is not going to achieve the desired outcome.

We therefore believe that a set of timely, robust and clear messages from the Supplier to the customer managing their expectations and outlining the impending action represents the optimum solution for all parties.

NPA’s are the result in a customer refusing to accept a PAYG solution. In the future with NSMP delivered, there are broad and flexible options to run a lenient and far more forgiving PAYG set of services for sensitive categories of the market. With NSMP solution in place, the Supplier will have greater certainty of the implementation of the de-energisation request. The scheduled time can be agreed or notified to the customer. It is worth re-emphasising that customers engaged in this unfortunate set of circumstances are already at the end of a very long process of protection measures, of which PAYG is an option, and which, in the future can be tailored to specific needs.

Question 6

We believe this is the most appropriate position to take given where the Programme is currently at, and we would welcome the opportunity in the future, to work with all interested stakeholders to support the introduction of new categories of market entities and participants.

Question 7

We are in agreement with the Commission's proposed decisions; however regarding the provision of data to the retail market to enable billing, we wish to clarify one point.

The customer will have an ongoing choice for provision of data service for their billing. The retail market data billing services are daily interval based, or two monthly register based in line with the confirmed market arrangements.