



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

## CER National Smart Metering Programme

### Status Update

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## Introduction and Programme Status

### ***Introduction***

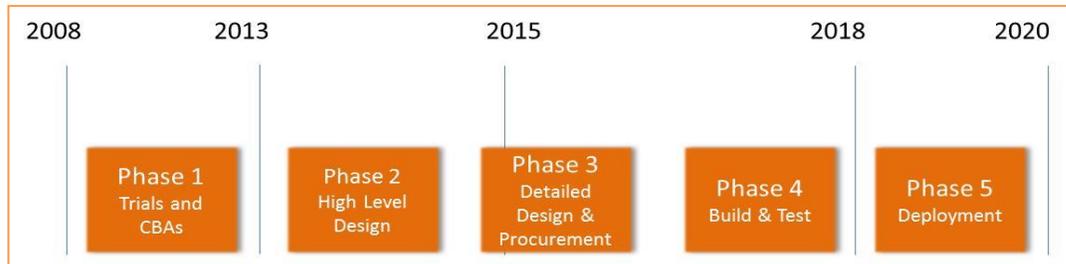
Smart meters are the next generation of electricity and gas meter and are being rolled out across Europe and internationally. This new technology will replace older, mechanical meters bringing benefits to the Irish consumer, the economy and the environment. CER is managing the National Smart Metering Programme (NSMP). The interest of the consumer is at the heart of the work being carried out and we've designed a solution that best meets the needs of energy customers.

The NSMP is currently in Phase 3 of the programme. This phase involves the development by CER of detailed consumer policy associated with smart metering and the procurement by ESB Networks (ESBN) and Gas Networks Ireland (GNI) of the required communications and metering solution to facilitate smart metering. This phase follows on from the CER's decision on the High Level Design for Smart Metering (CER/14/046), published in October 2014. Full details on the National Smart Metering Programme can be found on the CER's website, [www.cer.ie](http://www.cer.ie).

Following extensive engagement with NSMP stakeholders and public consultation over the past year, CER has now published its final "policy drop", completing this phase of consumer policy development. The following decision documents have been published as part of the consumer policy development work of phase 3 of the NSMP:

- Time of Use Tariffs (CER/15/270, published on 8 December 2015)
- Smart PAYG (CER/15/271, published on 8 December 2015)
- Empowering & Protecting Consumers (CER/16/125, published on 15 April 2016)
- Regulating Transition Activities of Market Participants (CER/16/124, published on 15 April 2016)

## Programme Status



The NSMP is currently in phase 3, as outlined in the figure above. Phase 3 is focused on smart metering detailed design and procurement, following on from the High Level Design published in October 2014. Phase 3 of the NSMP is made up of three key deliverables.

### 1. Consumer Policy

As outlined above, CER has now completed the development of consumer policy as part of phase 3, with the publication of 4 separate decision papers. CER has developed strong, consumer focussed policies that will ensure that all electricity and gas consumers are afforded the opportunity to benefit from smart metering. The NSMP is a universal programme, meaning that all electricity and gas customers, where it is technically feasible, will have their current mechanical meter replaced with a new digital smart meter. This is a natural evolution much like the upgrade in the telecoms and broadcasting sectors. The universal nature of the programme is important. It ensures that costs per consumer are minimised and benefits for each consumer are maximised. Not only this, but any alternative approach to the NSMP where meters were not replaced for all consumers might serve to create a “two-tier” energy market, where some consumers have access to a wide range of smart products and services, while other consumers are limited in their options. CER, noting its statutory responsibilities to protect all electricity and natural gas consumers is of the view that an alternative approach to smart metering or a move away from the universal approach does not serve the best interests of all consumers.

Notwithstanding this, CER is clear that there are significant challenges to be overcome in order to deliver the full benefits of smart metering to all consumers. There are challenges for the network companies (ESBN and GNI) in terms of

delivering the infrastructure at an efficient cost and in a consumer focused manner. There are also opportunities for the network companies both in terms of gaining operational efficiencies and in terms of utilising the infrastructure and the half hourly consumption data to deliver “smart grid” benefits. There are challenges too for energy suppliers in terms of the way that they do business and the potential for new entrants or innovative suppliers to participate in the market. CER views this however as a core positive aspect of smart metering. CER views smart metering as a key mechanism by which all consumers will have an opportunity to avail of competition, competition will be strengthened and the range of product and service offerings to consumers enhanced. This will allow consumers the opportunity to gain a better deal for themselves, than would be possible in the absence of “smart services”. This is a once in a generation opportunity for suppliers, new entrants and most importantly, for consumers all the while recognising that the current timelines are challenging.

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## Consumer Policy Papers

This section outlines at a high level the key decisions contained within the four consumer policy decisions.

### ***Empowering & Protecting Consumers (CER/16/125)***

Consumer policy on the NSMP has progressed over the past number of years, conscious of the ongoing development of new and innovating products and services. It has always been a key objective of CER to ensure that all customers (where technically feasible) can participate in the NSMP and use the new technology and the new information available to them to avail of the benefits of smart metering. Accordingly as technology continues to develop, it is important to ensure that appropriate measures are put in place to protect the energy consumer, both in terms of being able to avail of smart metering benefits and in terms of understanding the products and services offered. For example as part of its decision on Empowering and Protecting Consumers, CER has developed a standard template for ToU tariffs which suppliers must use when smart metering is introduced. Further, CER is of the view that it is in the interests of consumers to make such tariff comparison measures enduring and not just a transitional measure to promote switching and competition.

In tandem with the obligation on suppliers to present tariffs in this format, CER is also introducing an obligation on suppliers to make available an information service based on frequent information, making use of real-time data in the home, via a range of channels e.g. smart phone app, device, etc. to provide consumers more up to date, relevant information on their consumption. Customers will also be in a position to avail of the option of an In-Home Display (IHD) provided by ESB Networks. This decision ensures that customers have choice with regard to the presentation or media by which smart metering data in the home can be made available to them, which also ensuring that there is an obligation on energy suppliers to utilise the home area infrastructure and the rich data envisaged to be available from that infrastructure.

Smart metering will also change how reconnection and disconnection process operates. In future, there will no longer be the need for a meter technician to visit a house to reconnect or disconnect supply because this can be carried out remotely. Therefore, CER is of the view that it is pertinent to build on the existing customer protection measures to safeguard any potential issues which may arise

from the remote disconnection process. With smart metering, suppliers will now have the option to switch a credit customer to Smart PAYG in the event of non-payment (as long as this has been highlighted to the customer and is provided for in the terms and conditions of the contract) in order to prevent that customer losing supply. In addition, suppliers will have to the option to undertake a site visit if a customer is in difficulty paying their bill in order to engage with that consumer with a view to resolving the situation. Importantly smart metering allows for rapid re-connection so that if a customer, at the end of a lengthy process of engagement, does end up being disconnected, they should only be out of supply for a very short period of time.

### ***Transition to Smart (CER/16/124)***

A programme of this scale requiring the upgrade of approximately 2.2 million electricity meters and close to 700,000 gas meters will require extensive cooperation and coordination across industry stakeholders. In order to ensure the best possible experience for the consumer, CER is of the view that ESB Networks and Gas Networks Ireland, working in conjunction with other industry stakeholders, are best placed to formulate and maintain an optimal rollout plan. CER intends to place transitional licence obligations on ESBN and GNI to this effect and expects work to commence on the rollout planning process immediately. Further, CER is placing the obligation on ESBN, GNI and suppliers to work together on other key areas of the transition process such as testing and trialling. CER considers it appropriate that all stakeholders work together in this regard to ensure all systems are fully functional before smart services 'go live.' CER will also establish a participant readiness function on the NSMP to complement the existing market assurance process in order to provide assurances that market participants are ready for the changes under smart metering.

Finally, CER will take the lead on coordinating and planning all aspects of the transition process which will synchronise work on rollout planning, testing and trialling and participant readiness.

### ***Time-of-Use Tariffs (CER/15/270)***

A Time-Of-Use tariff is a tariff for electricity or gas under which the rate charged for each unit can vary depending on the hour of the day, the day of the week or the month of the year. Similar tariff models exist for other services such as on peak / off peak telephone calls, car parking and variation of prices by season for

holidays. However, ToU is restricted in the current energy market in Ireland with offers limited to day / night tariffs which requires the installation of an additional meter in the home. However, with the rollout of smart metering, ToU will be made available to all residential and small-medium sized businesses (SMEs). Many other European countries (such as Spain, Finland, France) are also implementing ToU tariffs for electricity customers in order to achieve the same goal.

Under the NSMP, electricity suppliers will make ToU tariffs available to all and this will afford consumers the opportunity to shift some of their electricity usage to times of the day when the cost of electricity is cheaper. Overall, this shift will lead to an overall saving in the cost of producing electricity which can further be passed onto consumers leading to wider system benefits and the environment.

In developing the policy on ToU, CER has ensured that consumers are provided with the flexibility to take-up a ToU tariff in tandem with being provided with the appropriate level of information from their supplier. Therefore, when smart services become available, suppliers may offer their customers a ToU tariff. This is what is described as 'ToU Go Active' date for that particular customer. Further, if 12 months elapses without the customer taking up a ToU tariff, the supplier must offer ToU to that customer and will provide a 'prompt' to remind the customer of the offer/ options available for ToU tariffs. All suppliers will be required to make available a Standard Smart Tariff (SST) as part of their suite of tariff choices but will also be free to offer other ToU based tariffs for customers. Over time, as consumers become familiar with the concept of ToU tariffs and become educated regarding the potential savings that they can make compared to "flat-rate" tariffs, it is anticipated that ToU tariffs will become the norm. CER intends to monitor developments in the market with a view to phasing out flat-rate tariffs in the future.

CER is of the view that this policy strikes the right balance and ensures that appropriate levels of information are provided to consumers in order to realise the benefits of ToU.

The CER's decision on Time of Use Tariffs is set out in [CER/15/270](#)

### ***Smart Pay-As-You-Go (CER/15/271)***

Currently almost 10% of electricity and 14% of gas residential customers have prepayment meters installed in their homes. This reflects the need for some households to manage energy bills more carefully and transparently but there also is evidence that many consumers now see prepayment as a lifestyle choice

and enjoy the control and convenience it affords them. Currently, to avail of prepayment products, an additional meter must be installed in the home. For some customers this can be quite a cumbersome process which poses challenges when a consumer wishes to switch supplier, revert to credit mode, etc.

However, with the rollout of smart metering, a new model of prepayment will become available. Smart PAYG will be accessible for all customers without the need for an additional meter to be installed. Further, it will introduce seamless switching between credit and PAYG making it more convenient for customers. Competition will also be enhanced by making the switching process easier and doing away with the requirement for additional meters and budget controllers to be removed or left as dumb devices in the home.

In addition, because the technology used will no longer require primary interaction to be with the meter or budget controller, customers will be provided with more flexibility when it comes to information on their balance and the topping-up process. For example, under Smart PAYG, balance messages may be accessed on the go through SMS text rather than on a budget controller on the wall. Top-ups will also be available online or through apps provided by a supplier. Smart PAYG customers will also be able to consume energy for a limited period of time if their balance turns negative, however this will be time limited rather than credit limited.

CER has sought to build on the existing models of prepayment in developing policy in this area while at the same time introducing more flexibility and protections for the energy customer under this new model of prepayment.

The CER's decision on Smart PAYG is set out in [CER/15/271](#)

## Next Steps

For all of the policy changes to be in place before smart services are introduced, CER must amend the relevant licences, codes of practice, etc applicable to the networks companies and suppliers.

Under current plans, this process will be progressed during 2017 – as part of the integrated plan for the NMSP as a whole.

Work will continue on the Cost Benefit Analysis (CBA) with CER intending to run the final iteration of the CBA for the programme in late 2016. This will inform the scope of the approach to smart metering and the progression to the penultimate phase of the NSMP – Phase 4 Build & Test in 2017.

CER has at all times adopted a consumer focussed approach to the NSMP and sought to safeguard the interests of customers whilst at the same time developing policy which will encourage competition and innovation in the market. CER will continue to discharge its duties as programme owner and ensure that the solution arrived at delivers the best outcome for customers and a smooth transition is achieved over the coming years.