



Smart Meters – when will Orkney benefit?

A brief run through information gathered from Smart Energy GB's presentation at SNP conference

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November 2015

Introduction

- Early thoughts
- Introducing smart meters
- What are the benefits?
- Impact on fuel poverty?
- How it will look – eventually
- Coming soon?
- Issues for Orkney

Early thoughts

- Grid Steering Group meetings 2012-13, told we would have to wait for smart meters in order to allow dumping of constrained renewable generation into storage heaters
- Smart meter rollout is coming closer – 2016 acceleration, 20 million 2016-2018, peak in 2019 and finish 2020 (Smart Energy GB)
- when Orkney will benefit is not yet clear
- Digital Scotland may be a route to go through if dedicated communications are not imminent
- Do we wait or do we push to the front of the queue?

Introducing smart meters

- Traditional electricity meters will be replaced, for free, by smart meters
- Energy supplier will contact you to arrange installation, but you can also contact them to find out when you can get yours
- The energy used will be shared with your supplier through a secure smart communications hub, ensuring accurate bills – no more estimates
- The hub will talk to the smart meter display, showing usage in real time

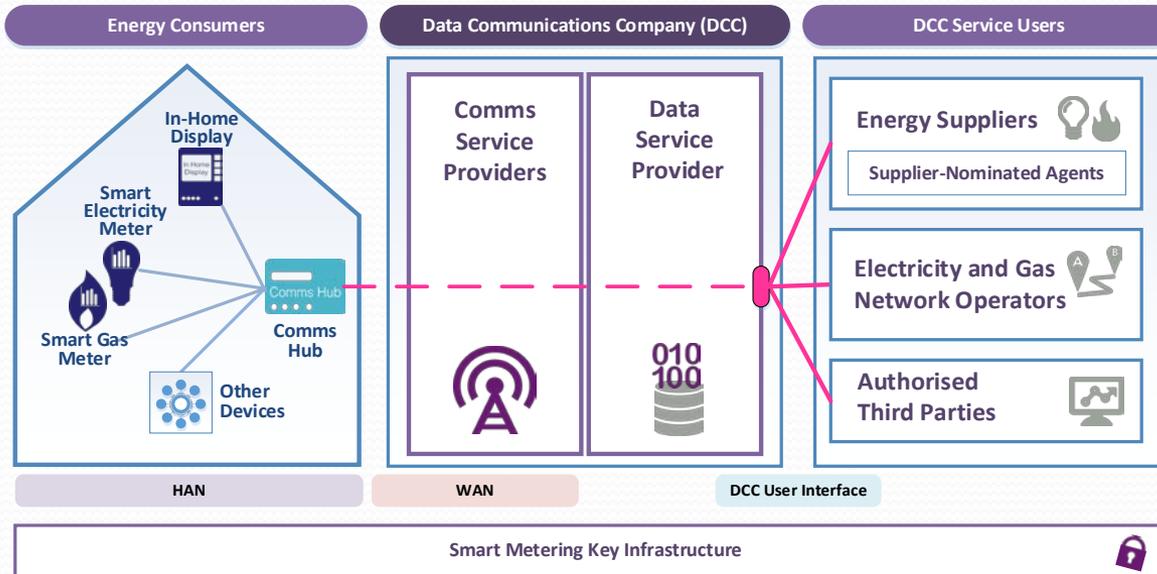
What are the benefits/issues?

- Ability to see what is being spent in pounds and pence
- See what energy is being wasted and reduce consumption
- Makes it easier to shop around for the best tariff
- For pay-as-you-go no more trips to the shop
- Increased self-disconnection?
 - 82% of people with smart meters have a better idea of what they are spending on energy
 - Only 56% are less worried about their bills

Impact on fuel poverty?

- Reliance on high-cost electricity makes management of usage critical to those in fuel poverty
- Orkney-specific – Norrie Kerr of Energy Action Scotland: ‘We should be using the energy being constrained in the islands much more smartly now’
- Storage heating – dumping cheap energy into people’s homes

How it will look - eventually



Data Communications Company managing delivery of Wider Area Network across GB:

- 99.5% coverage in the North Region
- 99.25% coverage in Central and Southern Regions by 2020

arqiva

Communications Service Providers:

Arqiva – Responsible for connecting 10 million homes and businesses in the North of England in Scotland.
Telefonica – Everywhere else.

Coming soon?

- Foundation meters (SMETS₁) already going out – rely on existing communications networks
- New generation meters (SMETS₂) will be installed in homes and small non-domestic premises once the DCC service is rolled out.
- Initially only SMETS₂ meters will work with DCC solution, but SMETS₁ meters will be adopted and enrolled in time.

DCC Progress report (Sept 2015)

- Revised plan was baselined March 2015
- DCC entered into System Integration Testing on time
- **DCC Live targeted for April 2016**
- **Large suppliers rolling out smart meters (using DCC services) from August 2016**
- **80% coverage at DCC Live**
- Mechanisms in place to manage uncertainty

Questions – do we need answers?

- How do we ensure that as many premises as possible achieve connectivity?
- How do we ensure that the consumer with a SMETS₁ meter can switch supplier like their neighbour with a SMETS₂ meter?
- How else should the energy services industry use this platform?
- What else does this initial investment enable?

Issues for Orkney

- High levels of fuel poverty and constrained renewable generation
- Smart meters give part of the answer to join these issues
- Do we lobby for early data and communications infrastructure – and then smart meters - as a ‘high-need’ area?