

Electricity settlement expert group

Meeting 1 – 16 June 2014





| 10.00 – 10.15 | Welcome and introductions | | |
|--------------------------------|---|--|--|
| 10.15 – 10.45 | Introduction to the settlement project | | |
| 10.45 – 11.15 | Roundtable: Initial views | | |
| 11.15 – 11.40 | Role and programme of work of the expert group | | |
| 11.40 – 12.15 | Capability of the Data and Communications Company (DCC) | | |
| | | | |
| 12.15 – 13.00 | Lunch | | |
| 12.15 - 13.00 13.00 - 13.30 | Lunch Analytical framework for the settlement project | | |
| | | | |



Introduction to the electricity settlement project

Jonathan Amos – Ofgem





Smarter Markets Programme – Ofgem's vision

Consumers are **empowered** by a market that delivers greater visibility, clearer **information**, **reliable switching** and **targeted protection**







SMARTER ENERGY MARKETS

ETTORING

EMPOWERED

2020 and

Consumers have more **control**, increased levels of **trust** and consequently are more **engaged** in the market







Consumers and providers become more **efficient** in the way they **use energy** and **interact with the market**







Continually building on the smart meter roll-out to create **smarter markets** in which **all consumers** have **confidence** and which support the **differing needs** of consumers.

Consumers are part of a dynamic market with greater competition, more innovation, better service, new entrants and new offers

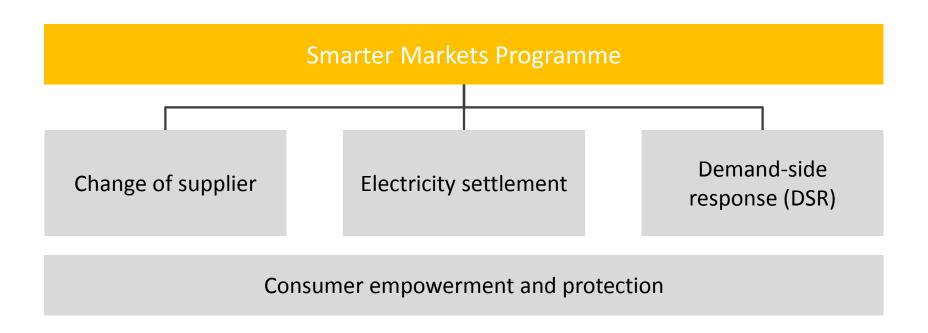








Smarter Markets Programme established to help drive changes to market arrangements necessary to realise our vision







Supplier Volume Allocation (SVA) arrangements

- The settlement process places incentives on suppliers to buy energy to cover their customers demand
- Our work focuses on the SVA arrangements, which determine how much each supplier's customers use in each half hour of the day
- Majority of consumers are settled based on estimates through the nonhalf-hourly (NHH) arrangements as part of a process lasting 14 months

| | Non-half-hourly | | Half-hourly | |
|--------------------|-----------------|---------------|-------------|---------------|
| Type | Number | Annual energy | Number | Annual energy |
| Import metered | 29,730,762 | 163.7 TWh | 120,541 | 130 TWh |
| Export metered | 3,457 | 0.01 TWh | 3,982 | 26.7 TWh |
| Unmetered supplies | 28,233 | 1.4 TWh | 268 | 2.7 TWh |

Correct as of December 2012. Source: ELEXON

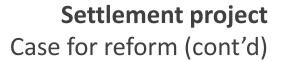


We consider it is in consumers' interests to be settled against their half-hourly (HH) data from smart meters

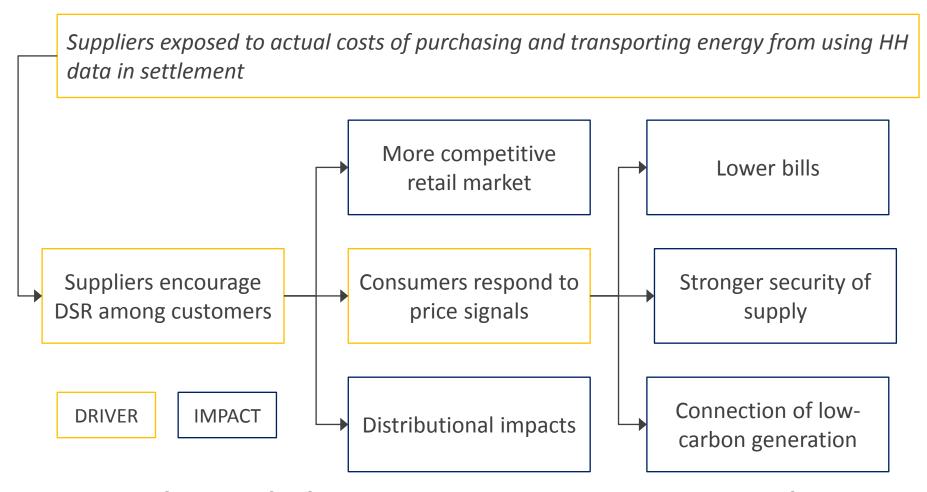
Likely benefits for consumers come from...

- 1. Helping create the right environment for **DSR**
- 2. Enabling more accurate **demand forecasting** by suppliers
- 3. Improving the **efficiency of the settlement process**

Settling consumers against their HH data supports the transition to smarter energy markets







A market in which consumers participate more actively is a central element of our vision for smarter markets

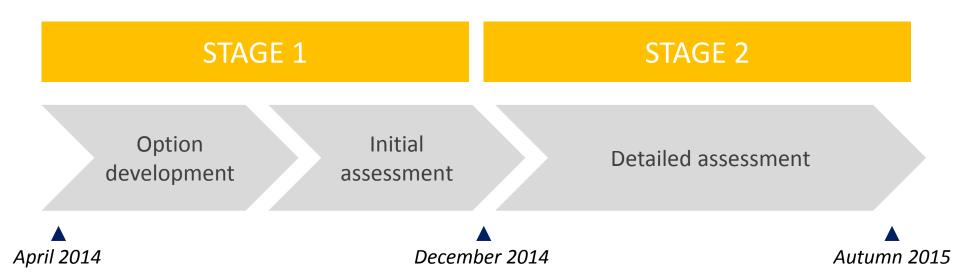


Work is underway to explore the potential for DSR among GB consumers, with some positive early results:

- Modelling by Brattle for Sustainability First estimates technical potential for DSR at evening peak on a winter weekday is:
 - around 9GW for domestic consumers in 2010, rising to around 12 GW in 2024 (BAU scenario)
 - around 5GW for commercial consumers in 2010, rising to around 6.5GW in 2025 (BAU scenario)
- Early results from Customer-Led Network Revolution show a positive response from 600 British Gas customers on time-of-use tariffs
 - on average, these customers consumed 3% less than the control group and their peak consumption was 10% lower
- EDF trialling dynamic time-of-use tariffs for domestic consumers as part of Low Carbon London



Our project will examine how domestic & smaller non-domestic consumers can be settled against their HH consumption data



STAGE 1 – shortlist options for using HH data in settlement

STAGE 2 – detailed assessment of shortlisted options



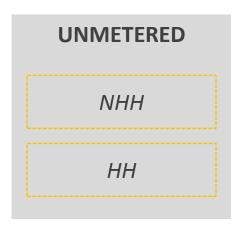
Maintain focus on SVA arrangements

other aspects of imbalance settlement (Central Volume
 Allocation, cash-out, performance framework etc) out of scope

Focus on settlement of sites with smart and advanced meters:









In stage one, we will examine the options for optimising the existing HH process so that it can accommodate more consumers

Process of settlement

- Centralisation of data processing and aggregation
- Estimation methodology
- Number and timing of settlement runs
- Data quality standards

Transition

- Timing of transition
- Method of transition

We will undertake a comparative assessment of options to shortlist those for detailed analysis in stage two



- Reform of the settlement process is critical to the realisation of our vision for smarter energy markets
- Opportunity to deliver benefits for consumers and industry
- Requires commitment from all interested parties...
- ...and a willingness to challenge assumptions and think creatively!



Roundtable: Initial views

Electricity settlement expert group



For discussion

- Introduction to the expert group organisation and relevant background
- What outcomes do you want the settlement project to achieve?
- What are the key challenges for the settlement project?



Role and programme of work of the expert group

Johnny Amos – Ofgem



In stage one, the expert group will help us to shortlist options for detailed assessment

Rationale

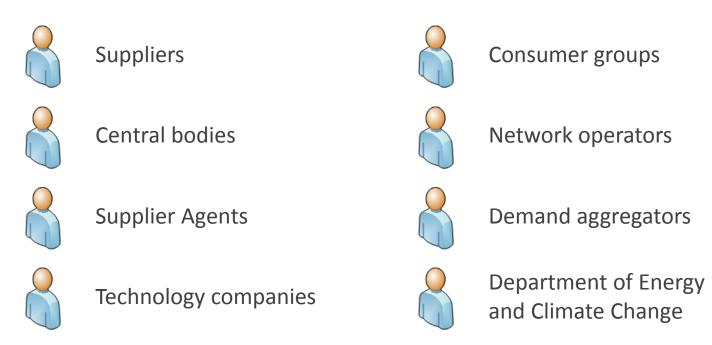
- Harness stakeholders' technical knowledge of settlement
- Help us to understand the impacts of reform on market participants and consumers

Role

- Review analytical framework
- Comment on and assess options
- Identify interactions between options and other relevant parts of market
- Comment on our plans for second stage



- We published a letter inviting applications for the expert group in April 2014
 - very positive response with over 30 applications
- Our intention is that the group should include representatives from the range of organisations with an interest in settlement reform







We propose that the expert group will meet six times from June to October

| Date | Morning session | Afternoon session |
|-------|---|---|
| 16/06 | Review terms of reference and evaluation criteria | Introductory discussion on options for settlement timetable |
| 10/07 | Detailed discussion on options for settlement timetable | Introductory discussion on estimation options |
| 31/07 | Detailed discussion on estimation options | Introductory discussion on centralisation |
| 03/09 | Detailed discussion on centralisation | Introductory discussion on transition |
| 01/10 | Detailed discussion on transition | Introductory discussion on reform packages |
| 23/10 | Detailed discussion on reform packages | Discussion on plan for second stage |



- All materials provided to the group will be published on the Ofgem website after each meeting
- Ofgem will minute discussions to publish on the website (once members have provided comment)
- Minutes will not attribute comments to an individual or organisation unless specifically requested or in relation to an action that has been agreed
- Plan to publish a summary of discussion at the expert group meetings in Q4 2014



- Do you have any comments on the terms of reference of the expert group, particularly its purpose?
- Do you have any comments on the programme of work for the expert group?



Capability of the DCC

Ian Marshall - DCC



Lunch

12.15 - 13.00



Analytical framework for the settlement project

Jonathan Amos – Ofgem



The analytical framework describes how we assess whether it is in consumers' interests to be settled against their HH data

Evaluation criteria

How we will judge whether options meet the objectives

Objectives

What settlement needs to deliver to support vision

Smarter markets

Outcomes we want to achieve for consumers



Market features taken as certain for analysis



Objectives are founded on scoping work in 2013 to understand how settlement may need to change to support smarter markets

- Provide incentives to support efficient use of DSR
- Enable suppliers to forecast demand accurately
- Provide an efficient process for determining how much each supplier's customers use in each half hour of the day
- Support market arrangements that rely on consumption data from settlement (e.g. distribution charging)

Do you have any comments on our objectives for settlement?



Criteria allow us to judge if options meet the objectives for settlement

- Accuracy in the allocation of volumes through settlement
- Speed of volume allocation
- Coverage in terms of type and number of customers
- Simplicity of the volume allocation process
- Cost in managing settlement
- Flexibility to accommodate changes in the regulatory framework and the market
- Integration with other market arrangements
- Implementation in terms of ease, timing and risks

Do you have any views on our evaluation criteria?



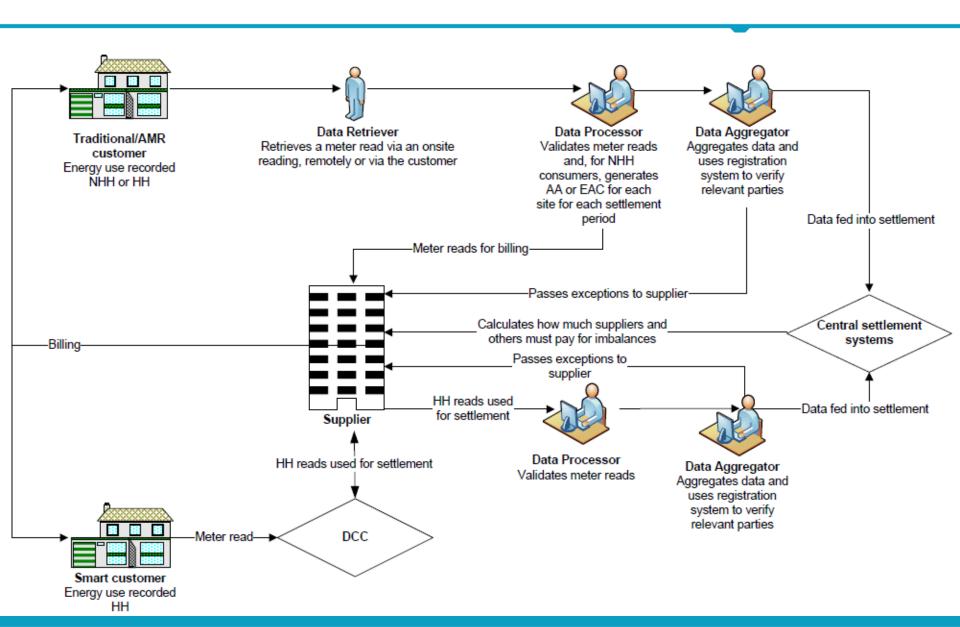


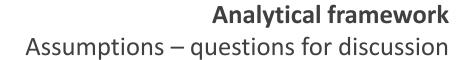
| Туре | Assumption | | | |
|---|---|--|--|--|
| Roll-out | Smart meters are installed in over 99% of domestic premises by end of 2020 | | | |
| | Smart meters are installed in 77% of smaller non-domestic premises by end of 2020; the remainder have advanced meters | | | |
| Access to data | HH consumption data is available for settlement | | | |
| DCC | DCC offers services from December 2015 | | | |
| | Suppliers receive consumption data from domestic premises through the DCC | | | |
| | Suppliers receive consumption data from 97.5% of smaller non-domestic premises through the DCC | | | |
| | Suppliers will not receive consumption data for smaller non-domestic premises with advanced meters through the DCC | | | |
| Settlement | No change to settlement processes outside the scope of our work | | | |
| Recognise need to test impact of assumptions on analysis 28 | | | | |



Analytical framework

Assumptions – new market structure







- Do you have any comments on the assumptions we propose to make?
- Are there any other assumptions that we need to make?



Settlement timetable

Jonathan Priestley – ELEXON



Wrap up and next meeting

Chair - OFGEM



Next meeting: 10 July 2014, Westminster Central Hall (SW1H 9NH)

- Morning detailed discussion on settlement timetable
- Afternoon initial discussion on the options for estimation when HH data is not available

Papers circulated: 3 July 2014



Ofgem is the Office of Gas and Electricity Markets.

Our priority is to protect and to make a positive difference for all energy consumers. We work to promote value for money, security of supply and sustainability for present and future generations. We do this through the supervision and development of markets, regulation and the delivery of government schemes.

We work effectively with, but independently of, government, the energy industry and other stakeholders. We do so within a legal framework determined by the UK government and the European Union.