

Electricity Network Access and Forward-Looking Charging Review

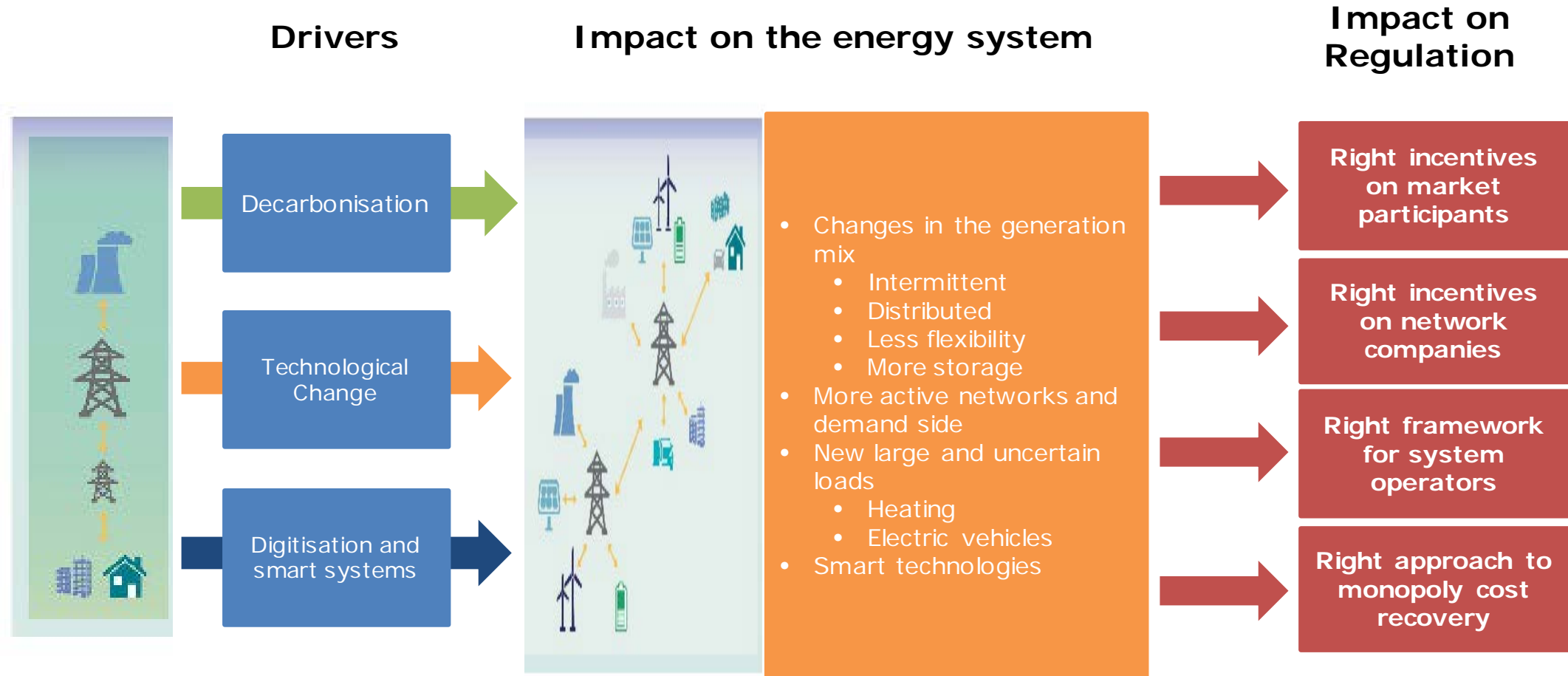
Supplier Engagement Introductory Webinar



1. Introduction to our Future Charging and Access Reforms
2. Background to the Network Access SCR
3. The purpose of our engagement with suppliers and our approach
4. Key themes we will be covering through this process

We want this webinar to be interactive and so we will be asking questions during our presentation. We also have the opportunity for you to ask questions at the end of the session.

Introduction to the Future Charging and Access Reforms



Facilitating change in future energy systems is an important part of our forward work programme



The energy system transformation will create challenges and opportunities for our electricity networks. Within our Future Charging and Access reform programme, we have major projects considering how electricity network access and charging should be reformed to address these changes and existing issues, including:

- **Access and forward looking charging reform.** We want to ensure that electricity networks can be used more efficiently and flexibly so that users can have the access needed, and benefit from new technologies and services, whilst avoiding unnecessary costs. We have launched a Significant Code Review (SCR) to deliver this reform.
- The **Targeted Charging Review (TCR)**. This seeks to remove some of the remaining embedded benefits and to allocate residual charges fairly, which should not send signals and which are there for recovery of the allowed revenue for the network companies. We are also using the SCR approach to address these issues.



1. What size of supplier do you represent?
 - a) Large
 - b) Medium
 - c) Small

2. How would you rate your existing knowledge of our Access and Forward-Looking Charges SCR on a scale from 'Not familiar' to 'I'm on top of it'?

Advice on accessing Menti/the questions to be provided here

Background to the Network Access SCR

Objective: We want to ensure electricity networks are used efficiently and flexibly, reflecting users' needs and allowing consumers to benefit from new technologies and services while avoiding unnecessary costs on energy bills in general.



Case for change:

Increasing **constraints** caused by both **generation and demand at distribution** level, yet also increasing **opportunity** to mitigate these through **flexibility** (eg Imperial College suggests potential savings of up to £4-15bn cumulatively to 2050 from reducing electricity network reinforcement).



Substantially **different approach across transmission/distribution and generation/demand boundaries** means increasing risk of **distorting investment and operational decisions**



What are Access arrangements and Forward-looking charges?

Access arrangements – the nature of users' access to the electricity networks (for example, when users can import/export electricity and how much) and how these rights are allocated.

Forward-looking charges – the type of ongoing electricity network charges which signal to users how their actions can either increase or decrease network costs in the future.

What decision did we make in December 2018?

- [We decided to launch a Significant Code Review \(SCR\)](#) – An SCR is a tool for Ofgem to initiate wide ranging and holistic change and to implement reform to a code-based issue.
- We decided on three guiding principles for the review (each of which encompasses a number of further considerations):

Arrangements support
efficient use and
development of the energy
system

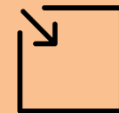
Arrangements reflect the
needs of consumers as
appropriate for an essential
service

Any changes are practical
and proportionate

What is the scope of our Significant Code Review?

Included in the SCR (Ofgem-led)

- Review of the definition and choice of transmission and distribution access rights
- Wide-ranging review of Distribution Use of System (DUoS) network charges
- Review of distribution connection charging boundary
- Focussed review of Transmission Network Use of System (TNUoS) charges

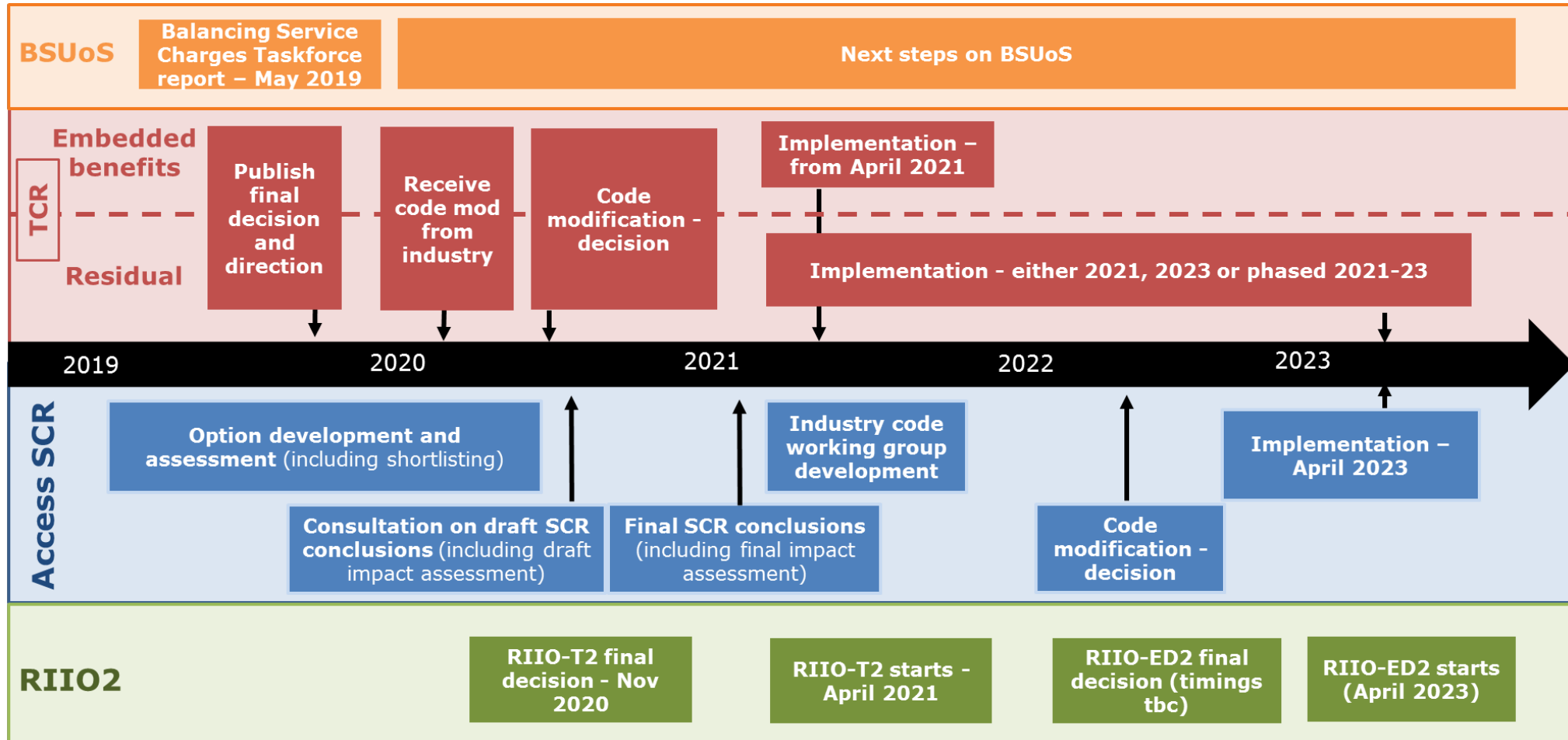


Areas led by industry outside the SCR

- Review of balancing services charges (BSUoS)
- Access right allocation



The timelines for the Network Access SCR have been developed to fit with the other elements of our FCA Reform programme and with the commencement of the RIIO-ED2 price controls



Our work since the Significant Code Review launched on 18 December 2018

Launched Delivery Group in Jan 19

- Comprises network companies, the Electricity System Operator and relevant code administrators.
- This group is **helping us develop and assess options**, drawing on their expertise and knowledge of how the networks are planned and operated.
- Has **launched several sub-groups**. Initial reports for network cost drivers, access and locational granularity published.

Other key engagement and activities

- **Engaging with wider stakeholders** to explain decision to launch SCR (eg Charging Futures Forum, webinar and podcast).
- **Issued information request to network and system operator and reviewed responses**. This will help inform option development and assessment.
- **Scoping out future workstreams to assess options** (eg literature review, user research and system modelling)

Launched Challenge Group in Feb 19

- Provides ongoing wider stakeholder input into the SCR – includes representation from large users.
- This will provide a **challenge function** and ensure that policy development takes into account a **wide range of perspectives and is suitably ambitious**.
- The group meets every two months and feedback is taken into account as part of Delivery Group reports and Ofgem's own work.

Next steps

- We intend to **publish two working papers this year** – the first this summer - setting out high level options and initial assessment. The second one by the end of the year will focus also on domestic users and small businesses.
- We will **continue to engage with stakeholders** (eg Challenge Group and Charging Futures).
- **We currently envisage any changes will be implemented by 2023.**

Purpose of this engagement process and our approach

Why are we engaging with you?

- To provide you with opportunities to input to our work and the shaping of policy
- To draw on the expertise and experience of suppliers
- To support robust decision-making



We have identified a long list of options for charging and access arrangements that could be applied to network charging and access for small users (By 'small users' we are talking here about those users who do not have an agreed capacity. These users are typically not CT metered and include domestic households, but could also include some small non-domestic users (eg micro-businesses). We are conscious that domestic and small businesses consumer arrangements may need particular consideration.

At this stage, we have not yet formed a preference for any particular option (or combination of options) and instead are exploring the potential benefits and issues with all of them. We will assess these options against our three guiding principles. We anticipate that some of our options may not meet the guiding principles and so would not form part of our shortlist of options, which will be considered in further detail as part of our IA.

To help us form preliminary views on the proposed options, we are seeking to understand

- how these options could work in practice
- what would be needed to enable consumers to engage with and benefit from the options, and
- which issues or risks may exist for domestic and small business users?

We are grateful for your participation in this process, as the evidence gathered in these interviews will form an important contribution our assessment of proposed changes.

This work is made of three parts:

This Webinar

to introduce you to our reform and the next steps of the engagement



Survey

sent out shortly after this webinar



Follow-up interview

To be planned in September
(only if requested by suppliers)



Input we are seeking from you and/or colleagues

- Attendance and participation in this Webinar
- Ensuring that the right people in your organisation are able to contribute to the engagement process
- In the survey, you can give us your views on the key themes.
- Responses will be anonymous unless you choose to provide your details
- In addition, at the end of the survey you will have the opportunity to request a follow-up interview
- In this meeting, you'll have the opportunity to discuss the key themes in detail and any follow-up questions that you/we may have.
- If desired, your responses can be kept confidential
- We may also discuss wider topics (relevant to our reform)

Key themes we will be covering

The survey contains questions that aim to understand how your organisation's **retail tariff design for domestic and SME customers** would be affected by the different options we are considering for how consumers access the electricity network and how they are charged for that access (large users are covered by a separate stream of work).

These questions will cover:

- *The extent to which access and charging options under consideration would lead you to recommend changes to your organisation's current approach to retail tariff design*
- *What these changes may be*
- *Whether these changes would include the introduction of new retail tariffs*
- *What these new retail tariffs would include*
- *What risks you perceive may exist for small users as a result of the proposed options*

- We have identified five basic options for **DUoS and TNUoS demand charges**, each with possible variants.
- All options could have a locational element and many could be billed using aggregated consumption data.

1. Volumetric ToU

Units energy prices (£/kWh) vary by time of consumption, with variants including (i) seasonality; (ii) number of time bands; and (iii) time bands set on assumed or actual demand profiles.

2. Actual capacity

Users are charged on their actual capacity - given the network is sized to meet peak capacity rather than energy volume. Variants include (i) charges differ between pre-defined periods; (ii) the period over which the capacity is determined; and (iii) the charge is based on a single or multiple periods.

3. Agreed capacity

Users are charged based on a capacity agreed before the start of the relevant charging period. Variants include those identified for actual capacity and (i) how the capacity is agreed; and (ii) what the consequences are of exceeding this agreed level.

4. Dynamic charging

Considering (i) Critical Peak Pricing (CPP), where users pay a high price for using the network at times of system (or local) peak a limited number of times per year, notified in advance, and a low price the remainder of the year, and (ii) Real-Time Pricing, where the unit rate that customers pay varies half hourly to reflect real time costs.

5. Critical peak rebates

Critical peak rebates are paid to users to reduce their demand during periods of network congestions (i.e. are the inverse of CPP). Variable factors would be similar to those identified for CPP.

We have identified three basic options for access rights, each of which has possible variants. There are also some cross-cutting considerations (items 4 and 5) for us to consider:

1. Level of firmness

Considers the extent to which a user's access to the network can be restricted, and their eligibility for compensation if it is restricted, variants include (i) firmness driven by physical drivers; (ii) firmness driven by consumer outcomes and (iii) financially firm access

2. Time-profiled access

Provides access to the network that is not continuous, year-round, but instead within certain time periods. Variants of this access option include (i) static time-profiled with variation of time; and (ii) dynamic time-profiled with variation over time depending on specific conditions

3. Shared Access

Multiple users across multiple sites obtain access to the network, up to a jointly agreed level, with the ability to coordinate to share access. Variants include (i) local shared access within a specific constrained location; and (ii) wider area shared access, with a larger number of users sharing over a broader constrained area

4. Standardised options

This includes consideration of options such as (i) standardised access with off the peg design choices and parameters; (ii) hybrid options with alterations to standardised options to better facilitate certain users' or networks' requirements or where bespoke options are available within standardised bands or thresholds; and (iii) bespoke access choices fully tailored to fit the requirements of a user or network condition

5. Monitoring and enforcement choice

Considering approaches that could be adopted to minimise the risk of users exceeding their access rights. This could include (i) financial consequences (a charge); (ii) contractual consequences, where a user has obligations to take specific actions if they exceed their access right; and (iii) physical consequences where a user could be curtailed or ultimately disconnected / de-energised.



For small users, we plan to consider whether adaptations to our options may be needed to enable consumers to engage with and benefit from new access and charging arrangements, including whether any protections for certain consumer groups may be needed.



Potential variants could include:

Charging options

Considering whether any limits on the level of locational or temporal granularity or degree of change in dynamic signals may be appropriate for specific types of small user demand

Access options

Considering whether any limits should apply on the choice of access option or level for specific groups of small users, for some or all demand, including a potential core access level option

Wider retail provisions

Considering the role for principles-based obligations or other retail market arrangements, including potential approaches to engaging with consumers in relation to any new arrangements

Aspects to be explored in our small users workstream include:

- Understanding of small user characteristics
- Potential enablers of benefits for these users
- Exploring potential adaptations and protection options which may help consumers benefit
- Develop a view on options and packages, and undertaking a high level assessment, considering our guiding principles

End user experience



Electricity prices are no more than necessary to deliver a reliable and low carbon electricity supply

Customers can choose from a range of retail products from suppliers and/or third parties that best suit their needs/preferences. The three main types of product offerings are:

1. **“Insurance” style offers** which provide simple and stable retail tariffs
2. **Technology based offers** which package technology such as rooftop solar, batteries, EVs or smart appliances while offering simple retail tariffs
3. **Time-varying offers** which include peak and off-peak retail tariffs, and potentially include the option of capacity based tariffs or access options.

What’s going on behind the scenes?



All aspects of the regulatory framework are working together in a coherent and effective way to reduce total system costs:

- Access rights and network charging
- Flexibility procurement
- RIIO network incentives
- Wholesale market settlement and balancing mechanism

- **Insurance style offers** – suppliers/third parties face cost-reflective network and wholesale market prices, bear that risk, and offer simple (eg flat rate) retail tariffs, with an implicit risk premium built in.
- **Technology based offers** – suppliers/third parties provide packages, including products (eg batteries), that respond to cost reflective network and wholesale market price signals to minimise costs, while keeping the retail prices that the customer “sees” simple. This could include non-firm or ‘managed’ access options. The end customer does not have to “actively” manage their consumption.
- **Time-varying offers** – suppliers/third parties “pass through” part or all of the cost-reflective network and wholesale price signals into the retail tariff structure, which may include access options (eg off-peak access) and charge options (eg exceeded capacity charges). End customer “actively” manages their consumption.



How would you rate your existing knowledge of our review now on a scale on a scale from 'Not familiar' to 'I'm on top of it'?

Would you be interested in participating in an interview following the survey? (Yes/No)

Do you have any questions for us?

You can ask them now or please contact us after this webinar.



FutureChargingAndAccess@ofgem.gov.uk

Options for your further involvement

- Complete the survey and request a follow-up interview at the end of the survey to discuss the key themes in details
- Attend the Charging Futures Forum, join specific webinars and use Charging Futures resources. See <http://www.chargingfutures.com/>
- Observe Delivery Group meetings

Our core purpose is to ensure that all consumers can get good value and service from the energy market. In support of this we favour market solutions where practical, incentive regulation for monopolies and an approach that seeks to enable innovation and beneficial change whilst protecting consumers.

We will ensure that Ofgem will operate as an efficient organisation, driven by skilled and empowered staff, that will act quickly, predictably and effectively in the consumer interest, based on independent and transparent insight into consumers' experiences and the operation of energy systems and markets.