

ofgem

ofgem E-Serve

Promoting choice and value
for all gas and electricity customers

Smart Metering Implementation Programme

Launch of the Prospectus

4 August 2010

Agenda

Introduction	Daron Walker
Key proposals and next steps	Robert Hull & Sarah Harrison
Q&A	Panel session

Smart Metering Implementation Programme

Daron Walker

SRO Smart Metering Implementation Programme

4 August 2010

DECC Structural Reform Plan



- 1. Save energy with the Green Deal and support vulnerable consumers**

Reduce energy use by households and businesses through the Green Deal, and help protect the fuel poor
- 2. Deliver secure energy on the way to a low carbon energy future**

Reform the energy market and work internationally to ensure the UK has a diverse, safe, secure and affordable energy system and incentivise low carbon investment and deployment
- 3. Drive ambitious action on climate change at home and abroad**

Work for international action to tackle climate change, and work with other government departments to ensure we meet UK carbon budgets efficiently and effectively
- 4. Manage our energy legacy responsibly and cost-effectively**

Ensure public safety and value for money in the way we manage our nuclear, coal and other energy liabilities

Smart meters – views of the Coalition Government



“We will establish a smart grid and rollout smart meters”.

The Coalition: our programme for government, 2010

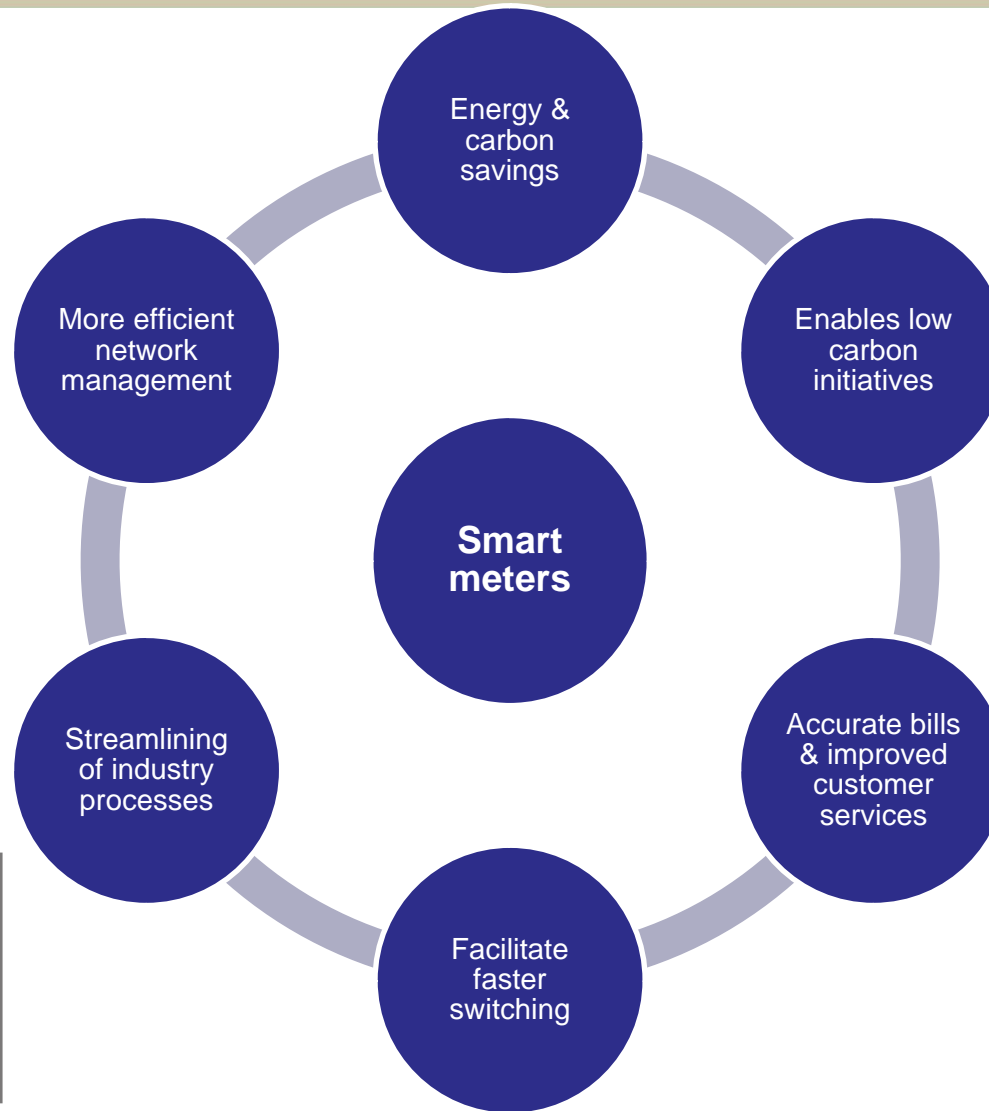
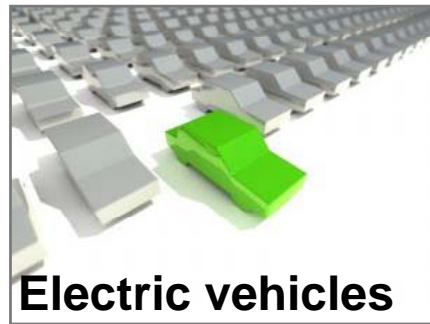
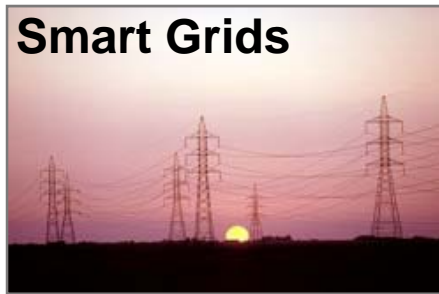
“ACTION 1: The Government is tackling the barriers to investment in energy efficiency by launching the Green Deal and rolling out smart meters”.

Annual Energy Statement 2010:
Departmental Memorandum

“The Prospectus makes clear that we want to see a significant acceleration of smart meter roll-out compared to previously published targets.”

Annual Energy Statement 2010: Departmental Memorandum

Our Vision for a Smart GB



The Prospectus

Prospectus (overview document)

Consumer Protection

Rollout Strategy

Statement of Design Requirements

Disablement/ enablement functionality for smart gas meters

Communications Business Model

Regulatory and Commercial Framework

Data Privacy and Security

Non-Domestic Sector

Implementation Strategy

In-home Display

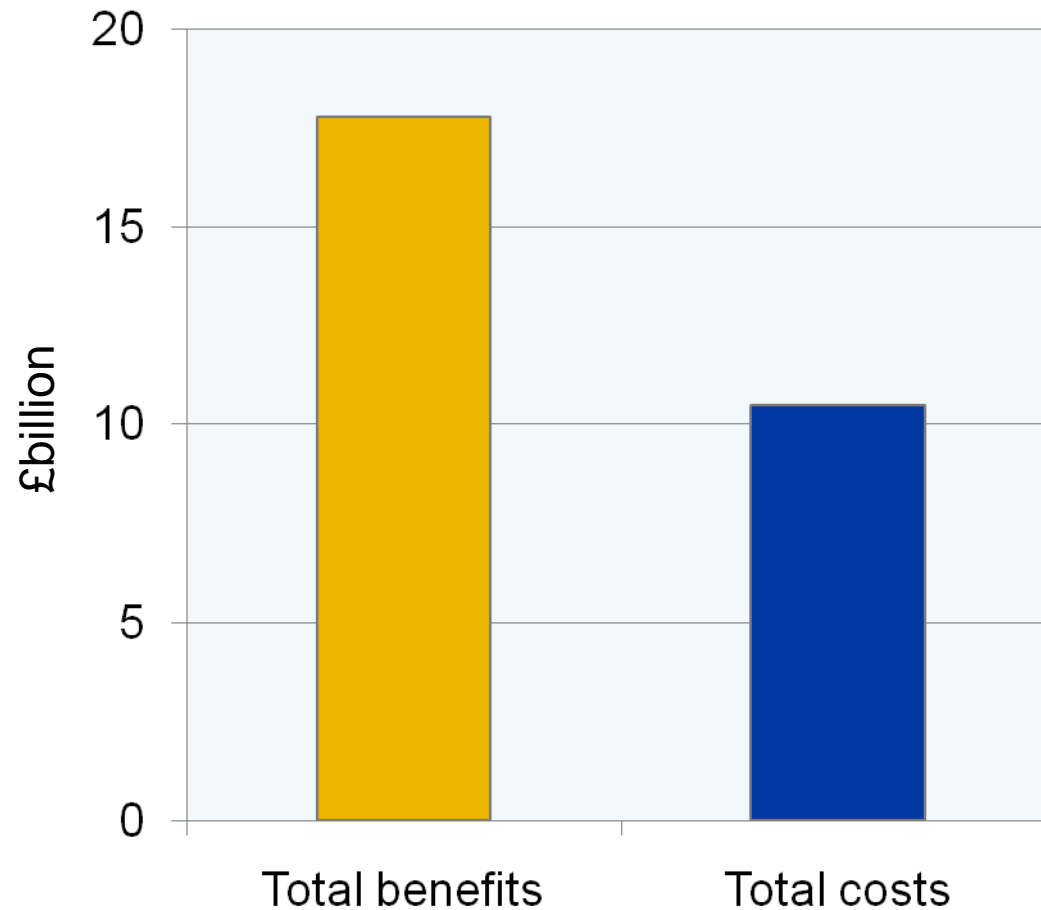
Two revised Impact Assessments for domestic consumers and SMEs

Prospectus – speed of rollout



- **Staged implementation approach proposed**
 - Summer 2012 - Mandated supplier rollout commences
 - Autumn 2013 - Rollout with mandated use of DCC for domestic customers
- **Determination to accelerate significantly the rollout compared to previously published targets and to establish ambitious but achievable targets for rollout**
- **Two deadlines for consultation responses:**
 - 28 September 2010
 - 28 October 2010

Updated Impact Assessment – Costs and benefits of the staged approach

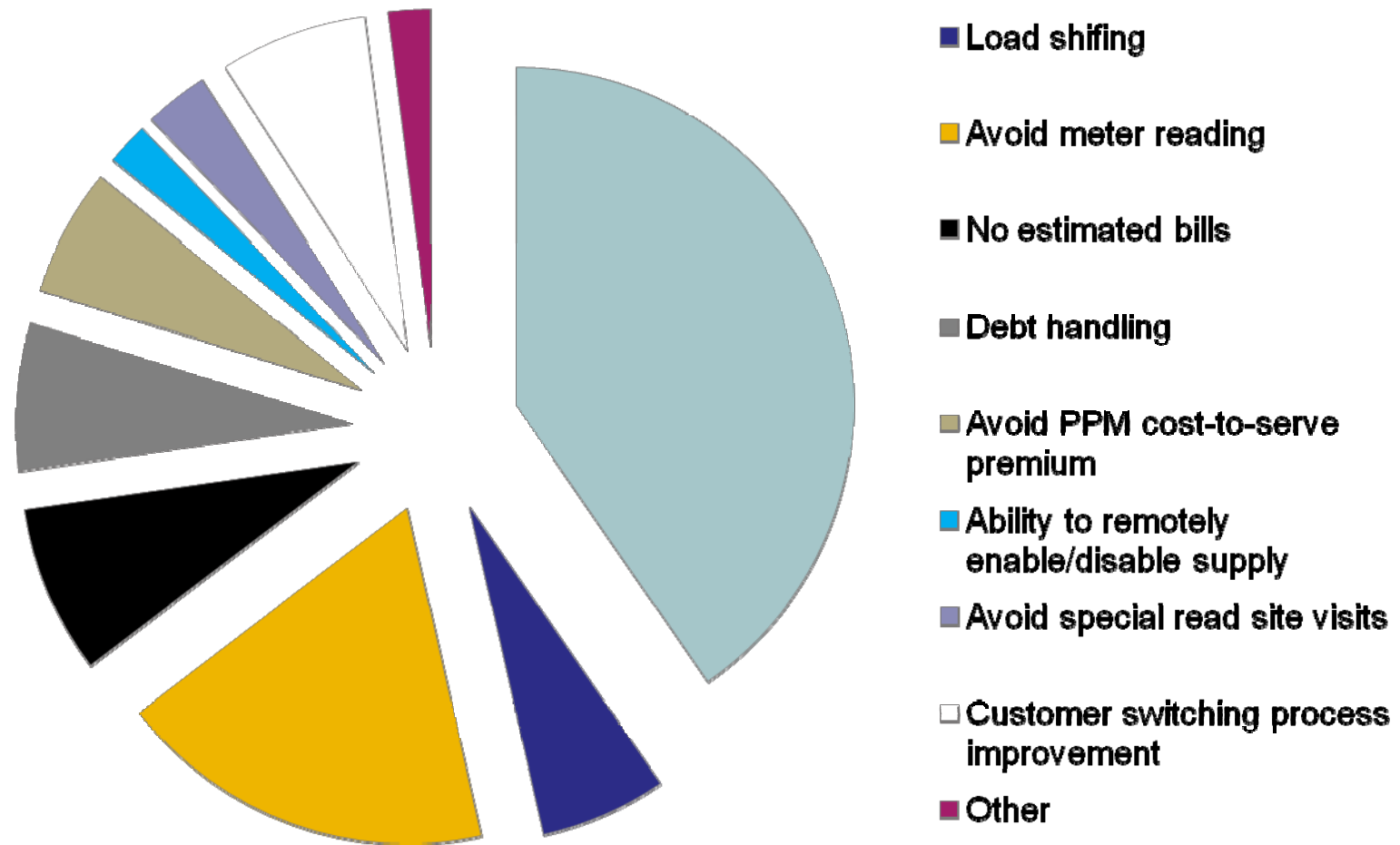


Strong positive business case for domestic and SME smart meter rollout: **£7.2 billion** net benefits*

* Costs and benefits assessed over 20 year period and discounted back to 2010

Smart metering – delivering the benefits

DECC forecast benefits (domestic rollout)



Source: Impact Assessment of a GB-wide smart meter rollout for the domestic sector, 2010

Working together



Sarah Harrison

**Senior Partner, Sustainable
Development, Ofgem**

Ofgem/DECC principles for Phase I

Developing a regime which...

- Protects interests of current and future consumers
- Economic and efficient & promotes competition
- Facilitates reduction in carbon and energy consumption
- Provides certainty for investment
- Sets fit for purpose functional requirements
- Delivers co-ordinated approach to roll out
- Provides flexibility for future developments
- Interfaces with other Government policy

...and paves the way for transition to next Phase

Consumer benefits

From smart
metering...

- More control for consumers over energy use
- More dynamic relationship between consumers and suppliers
- Improved customer service and new services
- Help for low income and vulnerable consumers

From energy
market
development...

- Scope for new entry and increased competition
- Scope for more cost effective management of generation and distribution
- Linkages with other service delivery

**Staged implementation – certainty for market & consumers,
scope for earlier benefits**

Consumer protections

To secure
positive
customer
experience...

- Set clear principle to put choice over data use in consumers' hands
- Ensure no unwelcome sales at installation or via IHDs
- Ensure consumers can access historical consumption data
- Prohibit upfront charging for smart meters and IHDs meeting minimum requirements
- Consider dedicated help scheme for vulnerable consumers
- Measures for non-domestic consumers

To develop
energy
market
regulation...

- Monitor suitability of existing arrangements to protect consumers
- Consult on remote disconnection and switching to PPM mode
- Monitor marketing activities and the quality and accessibility of information provided to consumers
- Review obligations around information provision

Early milestone - Spring package 2011

Maintain effective consumer input across programme development

Robert Hull

**Managing Director,
Commercial, Ofgem E-Serve**

Introduction

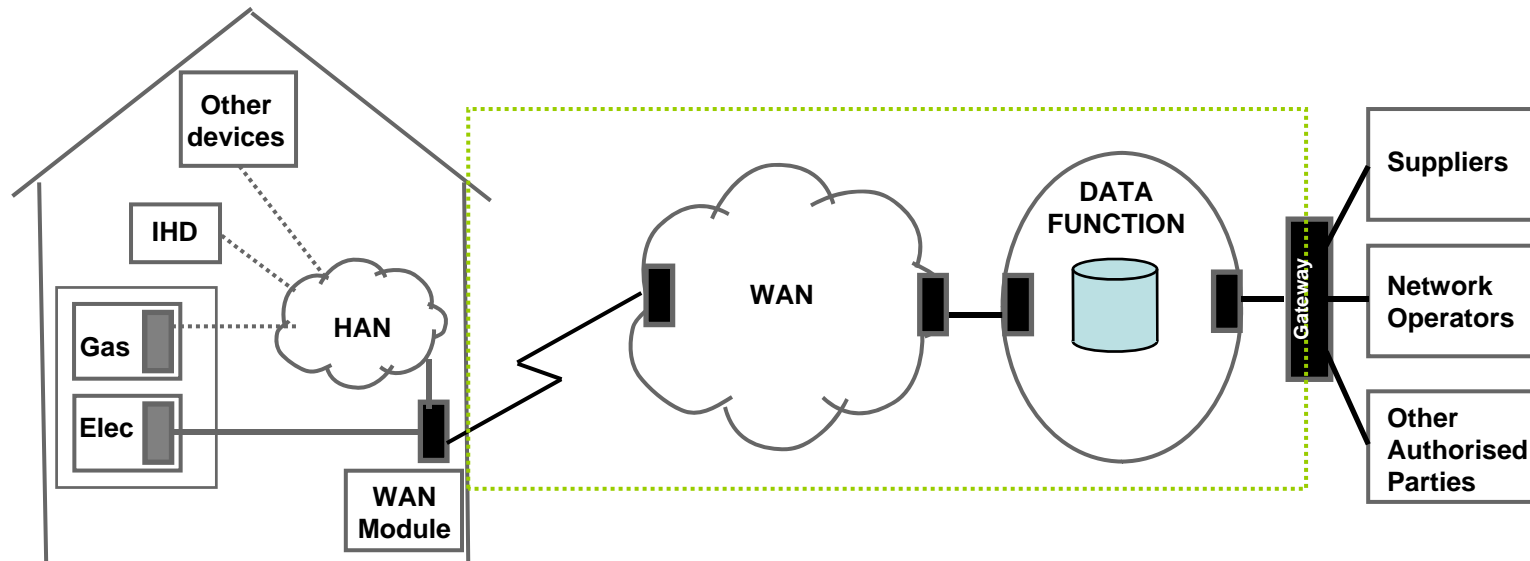
Key drivers

- Enable innovation in markets for energy demand management and energy supply
- Major change to industry processes
- Provision of certainty for short term and flexibility for long term
- Obligations on industry parties to deliver programme objectives
- Realising benefits at an efficient level of costs

Key proposals

- Set functional requirements, especially interoperability
- Obligation on suppliers to achieve targets
- New function to centrally coordinate data and communications (DCC)
- New industry governance arrangements

The proposals cover...



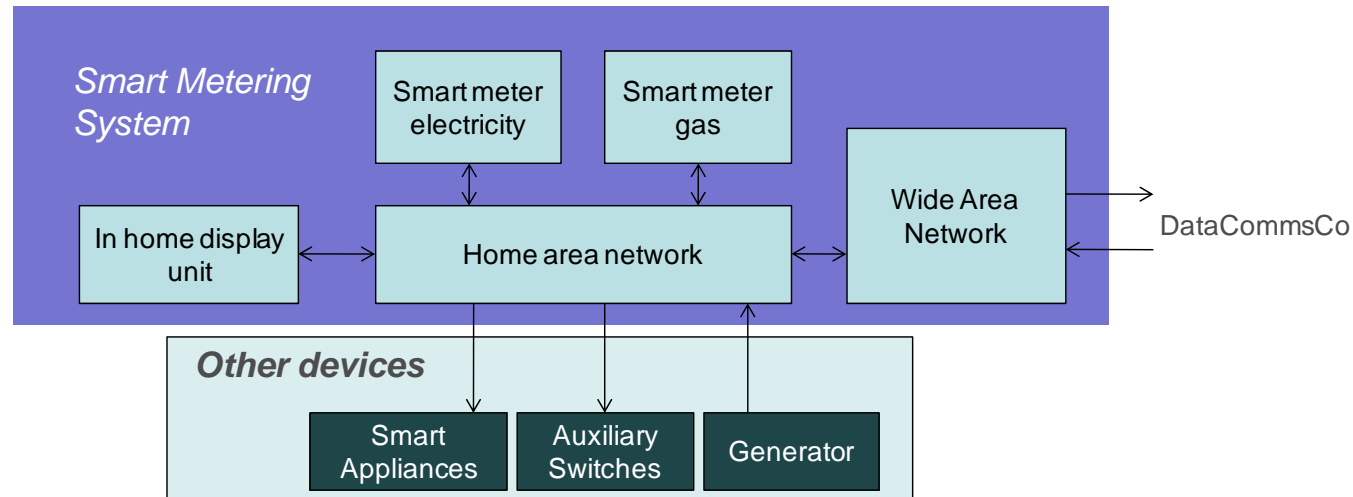
- Design requirements
- Communications business model
- Rollout strategy
- Regulatory and commercial framework
- Data privacy and security
- Non-domestic sector
- Implementation strategy

Design Requirements: Key proposals



- Approach
- Meter functionality
- Gas valve
- In-home display functionality
- Wide Area Network module
- Home Area Network

Key features of approach



- Functional requirements to technical specifications
- Development of interfaces between components to ensure interoperability
- Building on published technical standards and specifications
- Focus on functionality that delivers programme benefits

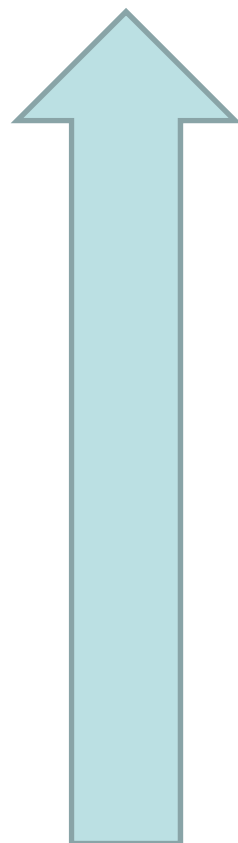
Benefits of proposed approach

- **Flexibility**
 - Room for technological development
- **Rapid process**
 - Certainty for suppliers/manufacturers/financers
- **Open standards & interoperable interfaces**
 - No barriers to innovation
- **IHD requirements**
 - Help consumers save energy
- **Scope of functionality**
 - Facilitating smart grids
- **Upgradeable**
 - Minimises equipment redundancy

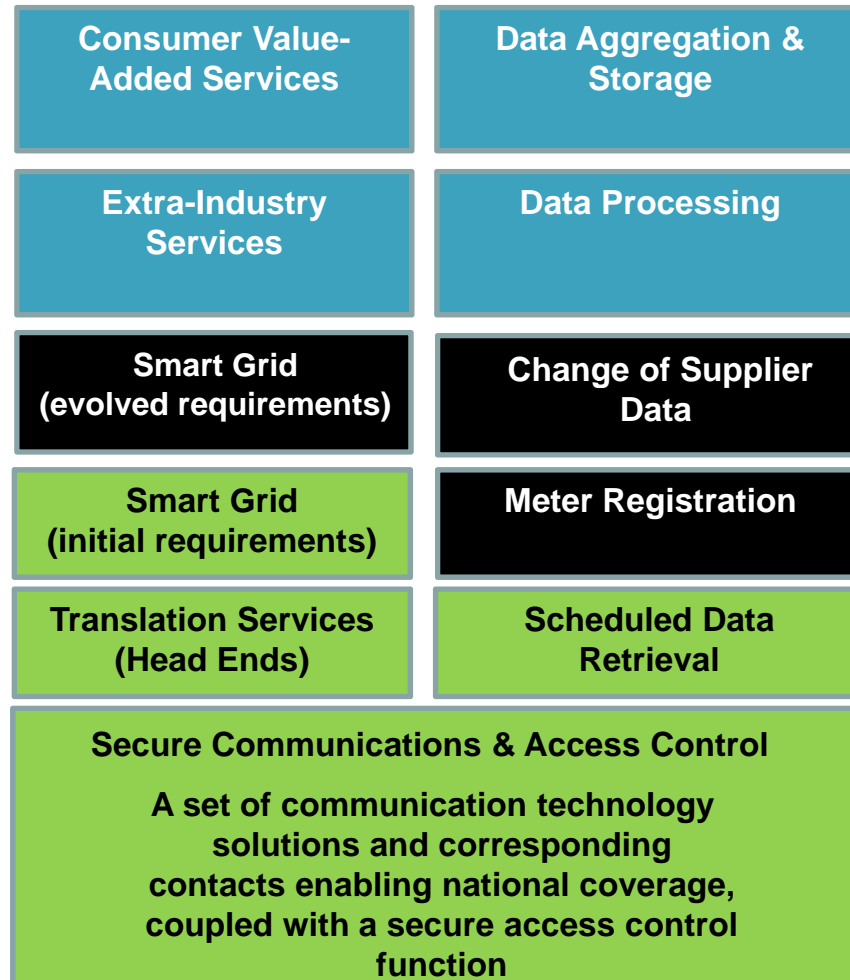
Data and Communications: Key proposals

- **Scope**
 - New entity covering gas and electricity
 - Initial scope will cover secure two-way communications and access control, translation services (head ends) and scheduled data retrieval
- **Establishment**
 - Creation of a new single entity on a GB-wide basis - DCC
 - DCC will be a licensed entity responsible for procurement and contract management, which will be independent from providers of data and communications services
 - DCC's licence will be granted by GEMA following a competitive licence application process
 - DCC will procure data and communications services to meet user requirements as these evolve over time
- **Governance**
 - DCC will be regulated through its licence, with details of interfaces with industry and user requirements set out in a new Smart Energy Code

Key features of approach: Scope

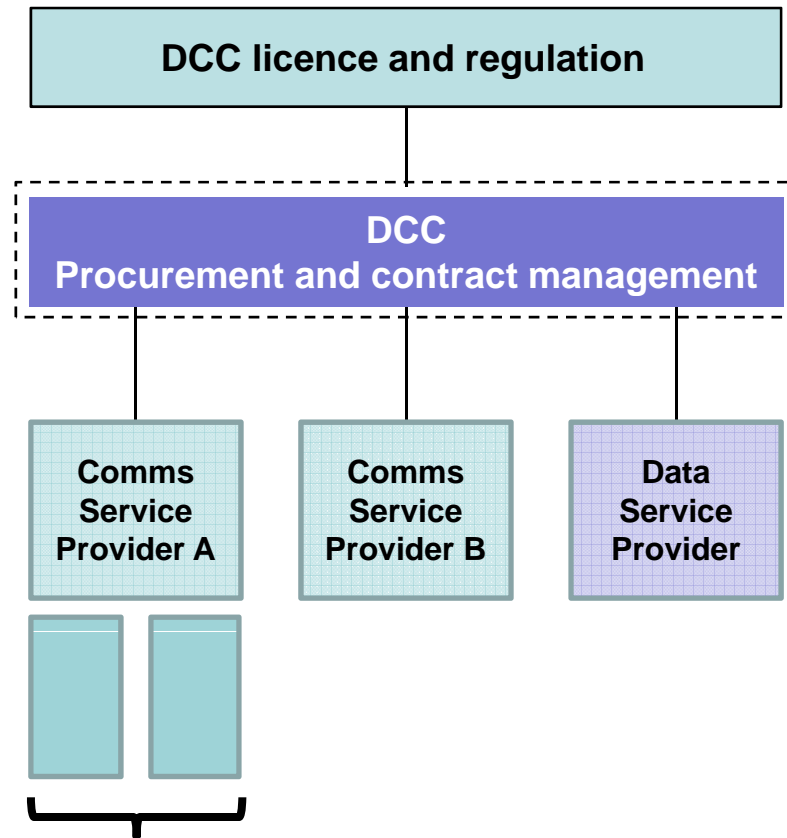


Evolution and flexibility



- **Require further analysis**
- **Should be enabled over time**
- **Proposed Initial Scope**

Key features of approach: Establishment and governance



Sub-contracted comms

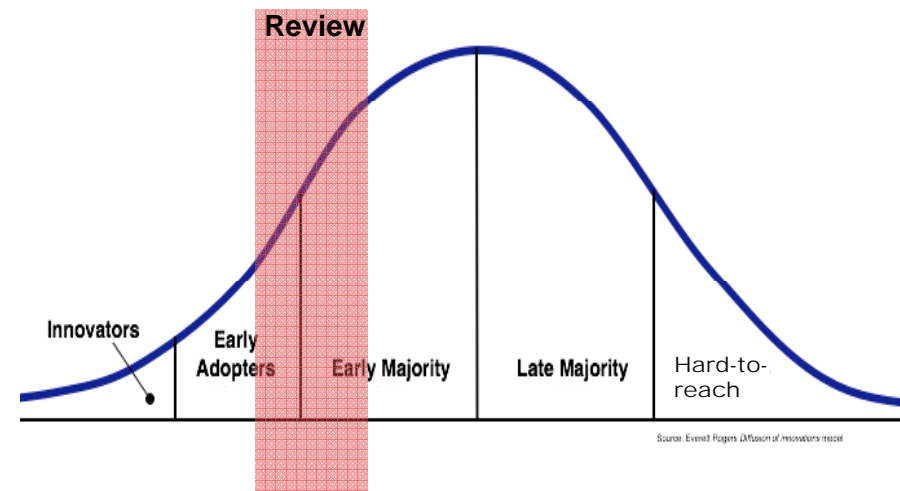
- DCC regulated under a new licence
- DCC will act as procurement and contract management entity
- DCC to procure data and communications service providers
- Providers may sub-contract for services

Benefits of proposed approach

- **Initial scope**
 - Accelerate set-up while delivering majority of benefits
- **Independence of procurement and management function from service providers**
 - Scope for effective competition
 - Flexibility for development
- **Licensed entity**
 - Certainty to all stakeholders
- **Builds on existing industry models**

Rollout Strategy: Key proposals

- **Supplier targets for completion of rollout**
 - Monitoring and compliance
- **Broad flexibility over pattern of installations**
 - Respond to consumer demand
 - Engagement with third parties
- **Review process**
 - Potential introduction of further measures in later stages (e.g. local coordination, project partnerships etc)
- **Code of practice on installation**
- **Initiatives to support consumer engagement**



Benefits of proposed approach

- **Requirements on suppliers (e.g. code of practice)**
 - Will promote a positive customer experience of the rollout
- **Approach**
 - Gives broad flexibility to suppliers helping them to start rollout as quickly as possible
 - Enables suppliers to respond to consumer demand for smart meters and to develop their plans in the light of experience and feedback
- **Programme review**
 - Ability to monitor progress of rollout activities
 - Flexibility to modify rollout strategy in later stages

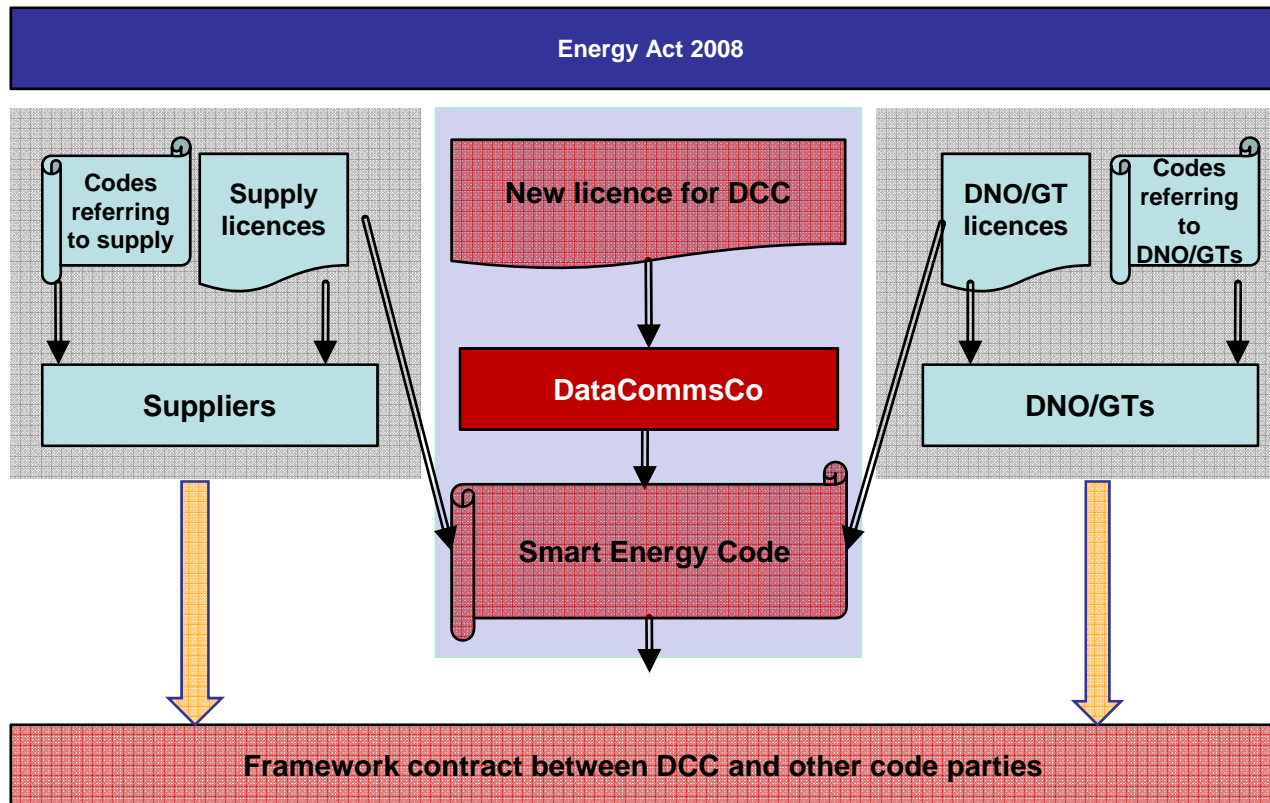
Non-Domestic Sector: Key proposals

- **Use of DCC**
 - Suppliers or metering service agents would not be required to use DCC for non-domestic meters but could do so if they wished
- **Suppliers would be required to take all reasonable steps to complete the rollout**
- **Exceptions**
 - No new exceptions are proposed at this stage (beyond those previously identified for "advanced metering" around 2014)

Data Privacy and Security: Key proposals

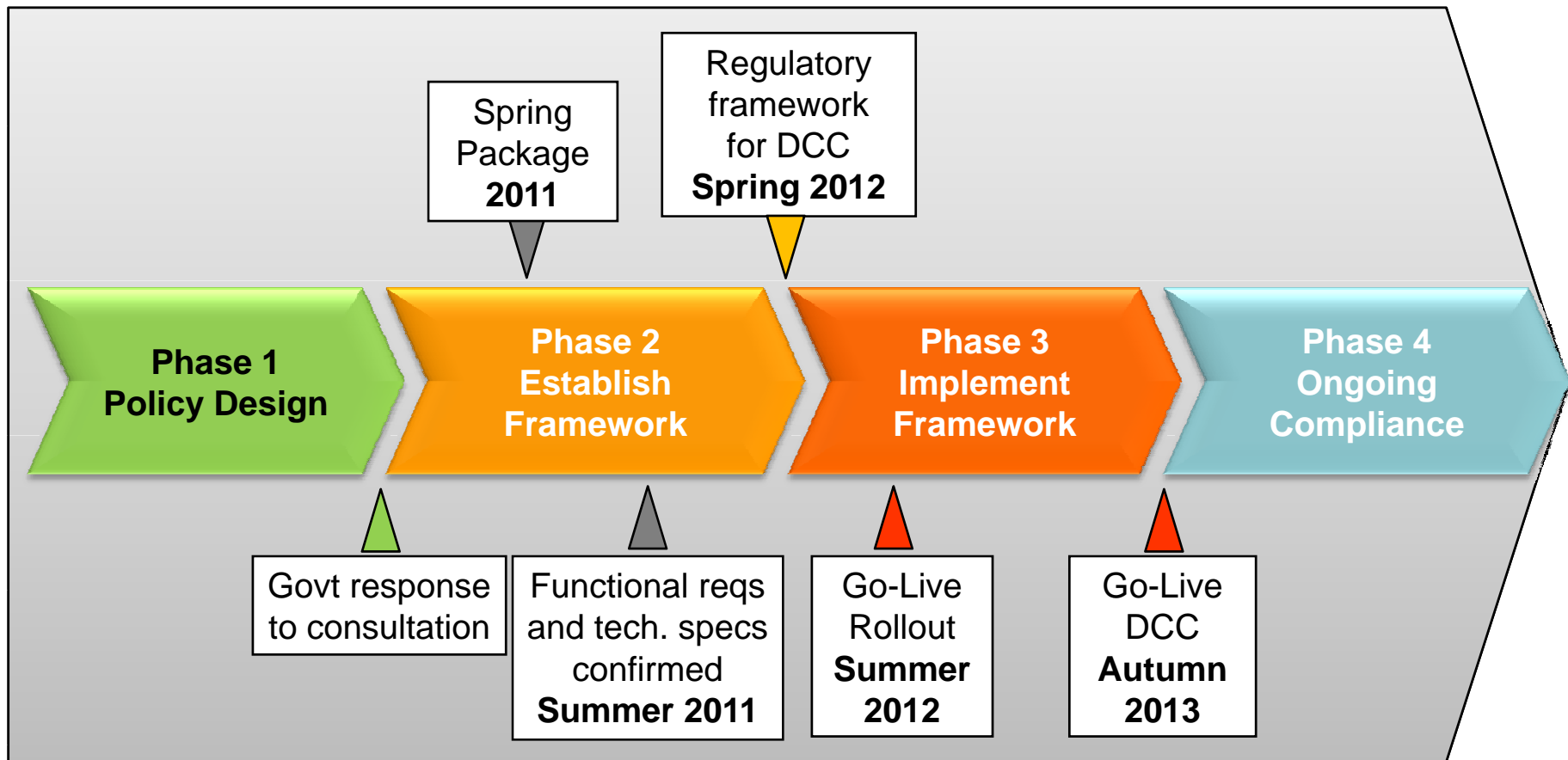
- **Data privacy:**
 - The consumer shall choose in which way consumption data shall be used and by whom, with the exception of data required to fulfil regulatory duties
 - Consumers are at the heart of the decision-making process
- **Security:**
 - A full Privacy Impact Assessment will be developed
 - The Privacy and Security Advisory Group (PSAG) will provide expert advice and ensure privacy and security issues are appropriately addressed
 - End-to-end security is being built-in from the start

Regulatory and Commercial Framework: Process



- Amendments to existing regulatory framework
- Proposed new regulatory instruments
- New contract to give force to provisions of the Smart Energy Code

Implementation timetable



Implementation Strategy: Key proposals and features

- **Staged approach to implementation**
 - Early benefits to consumers and managed risk for DCC establishment
- **Maintain competitive energy markets and consumer protection**
- **Establishment of two expert groups, an Implementation Coordination Group and wider engagement activities**
- **Set timetable**
 - Certainty to individual participants

Stakeholder Engagement: Existing and new

Existing engagement (maintain and develop):

- Consumer Advisory Group (CAG)
- PSAG, SMUG, Disability Advisory Forum
- Workshops
- Bilateral meetings

New engagement:

- Smart Metering Design Group (SMDG)
- Data and Communications Group (DCG) } Including Communities
- Implementation Coordination Group (ICG)
- Consumer and rollout workshops

Consultation and website

- **Two response dates:**

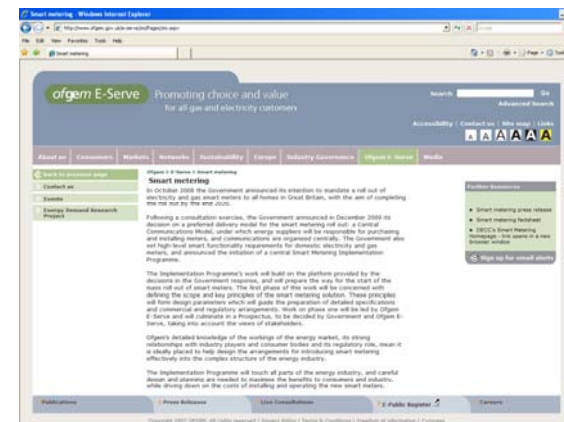
- **28 September:** Priority questions *asterisked* in Appendix 1 of Prospectus:
 - Statement of Design Requirements
 - Implementation Strategy
 - Rollout Strategy
- **28 October:** All other questions

- **Programme website**

- Today's presentation and expert/advisory group material will be published on the website

- Contact for smart metering team:

smartmetering@ofgem.gov.uk



Key contacts

- **Director of Smart Metering:** Colin Sausman
- **Smart Meter Rollout:** Neil Barnes
- **Smart Metering Design and Delivery:** Adrian Rudd
- **DataCommsCo Design and Delivery:** Dora Guzeleva
- **Consumer and complementary activities:** Maxine Frerk

Q&A Session