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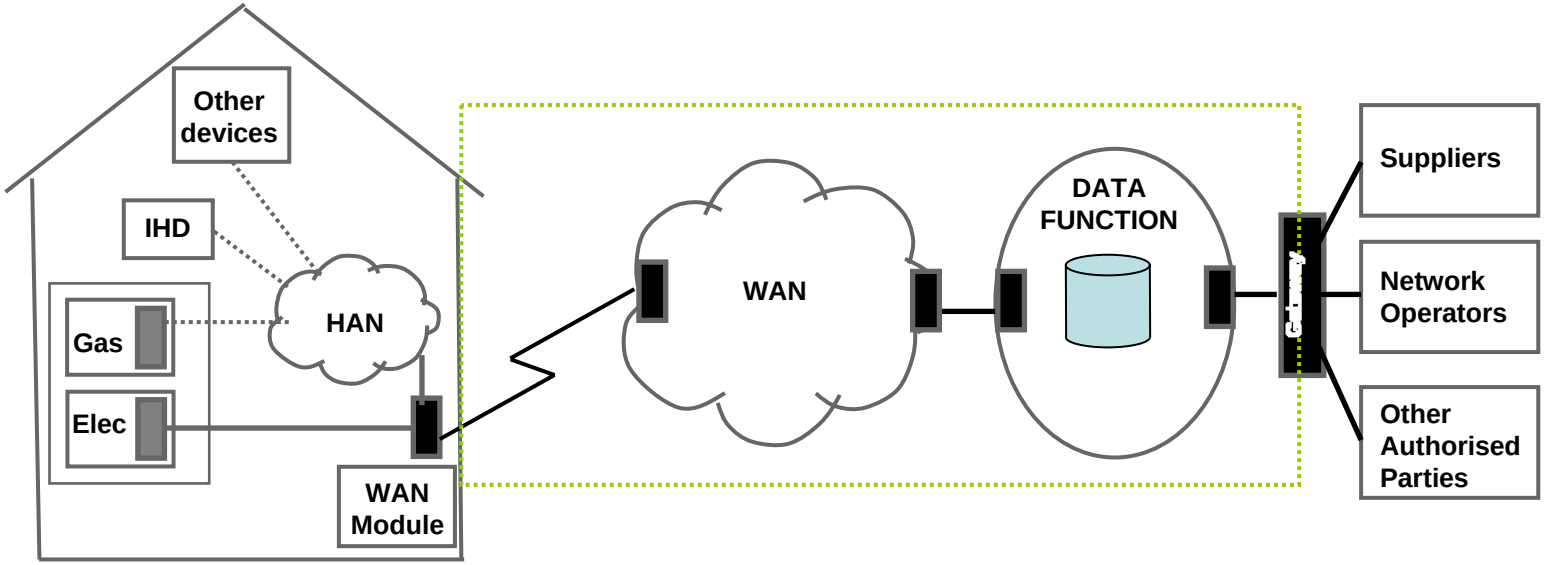
Smart Metering Implementation Programme

NICC Open Forum 2010

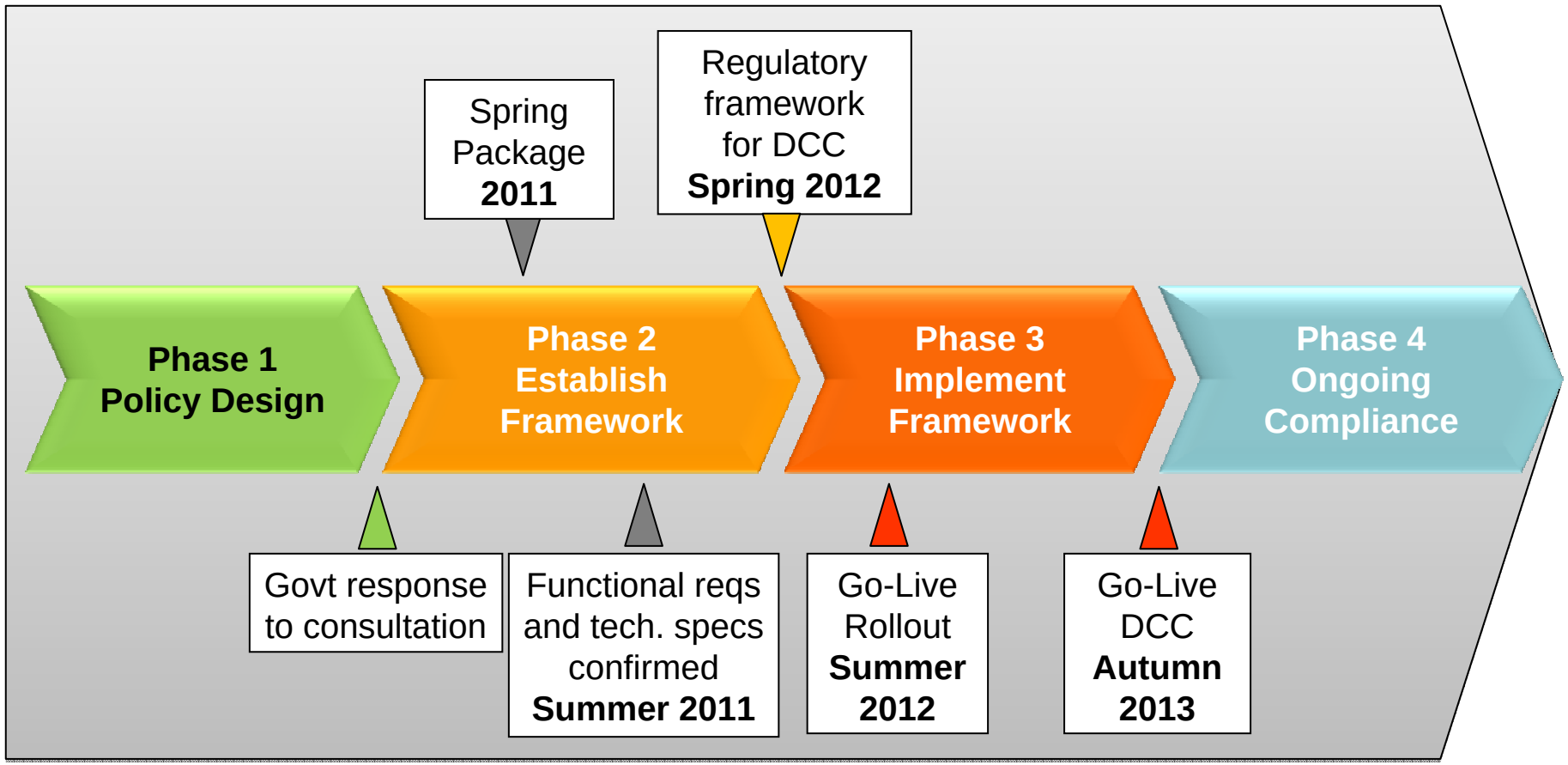
30 November 2010

The Prospectus proposals covered…



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

Staged Implementation



Why do we need DataCommsCo (DCC)?

- Ensure interoperability and facilitate energy competition
- Drive cost-efficiency in the provision of data and communications services
- Maximise the opportunity for full rollout of smart metering in Britain
- Ensure comprehensive and consistent security arrangements
- Rationalise the energy industry to become more efficient
- Enable the active management of Britain's energy networks
- Support initiatives to provide additional, value-added services through DCC infrastructure

Data and Communications: Key proposals

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

Some Key Issues

Data management

- The extent to which DCC's role goes beyond data carriage into data management and provides a mechanism to streamline energy industry processes

Communications services

- The extent to which it could use its network to enable the provision of value-added services beyond the energy industry

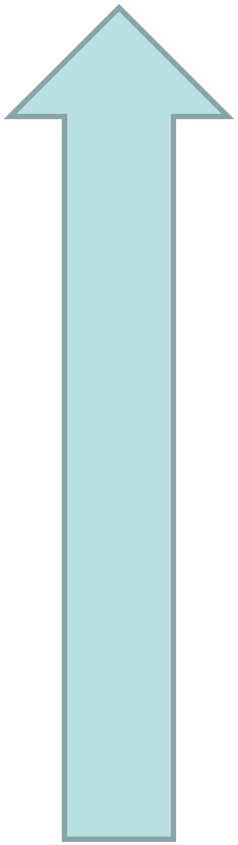
Staged implementation

- Needed to drive early benefits but presents interoperability challenges

Key policy issues

– What is the scope of DCC's data activities, initially and in the future?
– What is the level of regulation, including incentive & cost recovery mechanisms?
– What is the optimum procurement strategy / timeframes for implementation?
– What measures should be put in place to enable staged implementation?

DCC: Scope

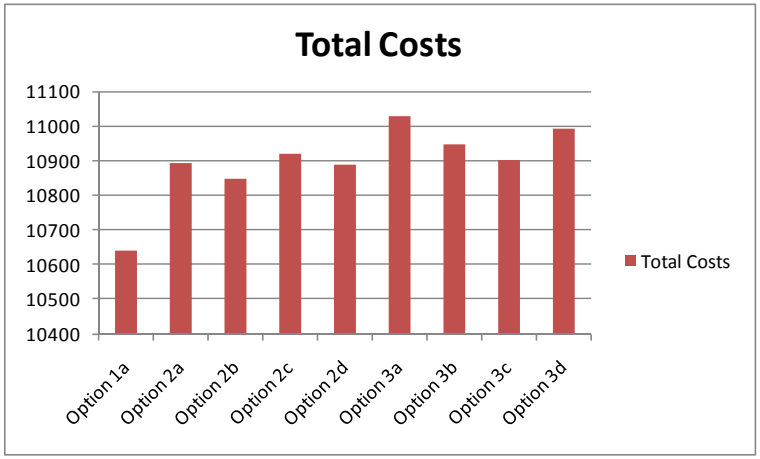


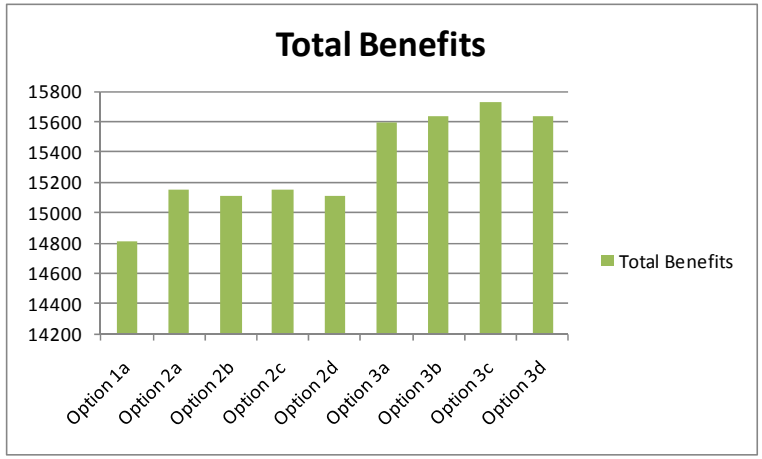
Evolution and flexibility

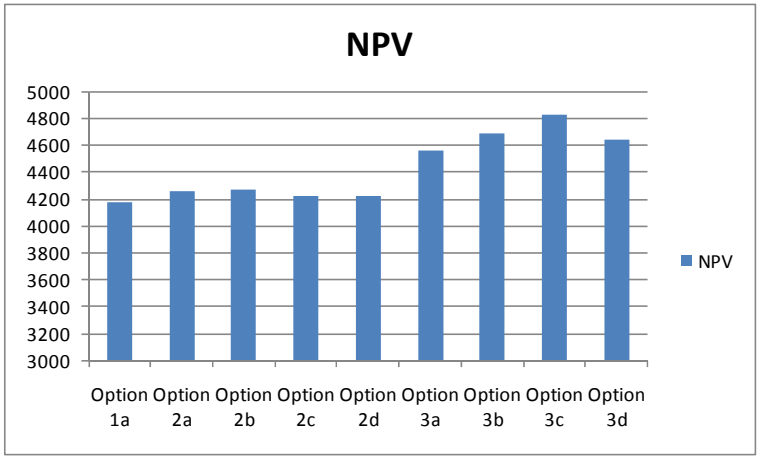
Consumer Value-Added Services	Data Aggregation & Storage
Extra-Industry Services	Data Processing
Smart Grid (evolved requirements)	Change of Supplier Data
Smart Grid (initial requirements)	Meter Registration
Translation Services (Head Ends)	Scheduled Data Retrieval
Secure Communications & Access Control A set of communication technology solutions and corresponding contacts enabling national coverage, coupled with a secure access control function	

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

Results of Information Request

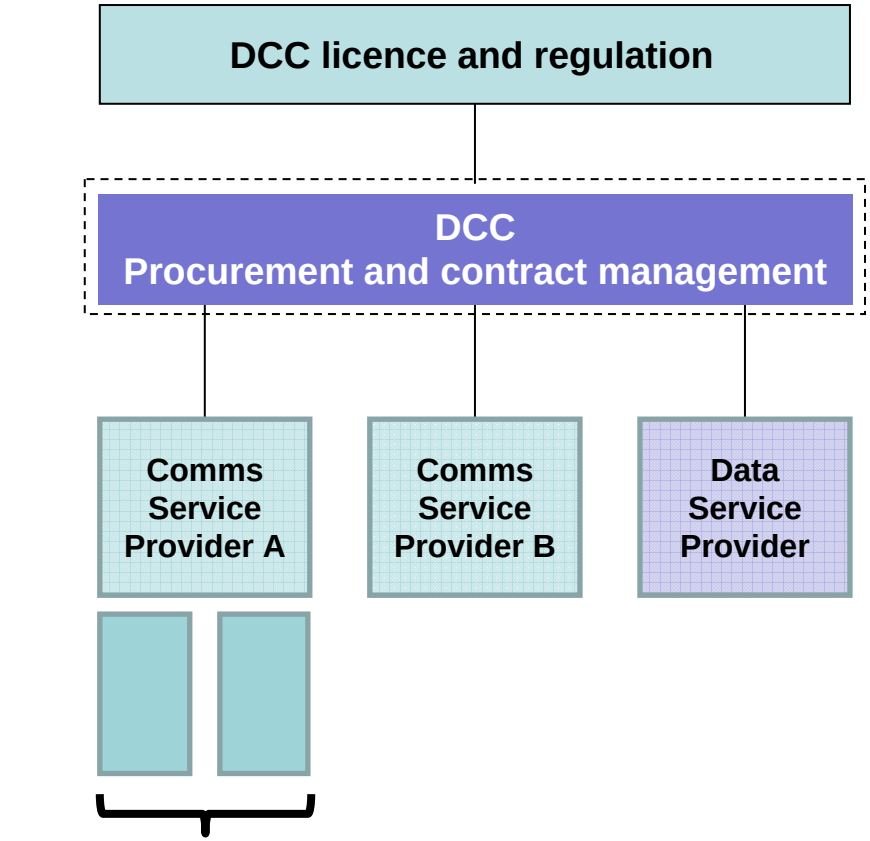






- Option 1 = initial scope only
- Option 2 = initial scope + registration
- Option 3 = initial scope + registration + data processing, agg & storage
- a = withering on the vine; b&d = full migration at Go Live; c = initial scope at Go Live followed by migration to option 2 or 3
- Costs, benefits and NPV are all calculated on same basis as DECC IA
- Responses have been 'grossed up' to industry level based on market share or similar data

DCC: Establishment and governance



- 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

DCC Establishment

- DCC should operate under a new licence awarded via a competitive licence award process
- The extent of licensed activity under the new DCC licence should be limited to the procurement and contract management of data and communications services contracts
- Tier 1: A number of well defined activities need to be undertaken as part of the process leading to licensing of DCC
  - Prohibition Order and Licence Conditions
  - Licence Application Regulations
  - Licence Application Process
- Tier 2: Evidence suggests that timescales for procurement and establishment of DCC's service providers anticipated in the prospectus were overly optimistic

Interim Interoperability (1)

A staged approach to implementation is proposed in order to establish early benefits to consumers and to manage the risk for DCC establishment

- Analysis suggests that the DCC will not be able to provide services until late 2013 at the earliest

•Risk of interoperability related issues post confirmation of technical specification (mid-2012) until the in-service date of the DCC

•Interim interoperability issues need to be addressed to maintain competitive energy processes and consumer experience

•The issue is therefore whether there is a credible Interim Interoperability Arrangement that provides benefit and can be delivered in the timeframe

•Only reduced functionality is practicable pre-DCC, which may impact on the ability to automate some processes, such as PPM

Interim Interoperability (2)

- Wish to roll out smart meters in advance of DCC's services being available but meters will lose functionality / benefits on churn
- With respect to existing smart meters
  - "smart" functionality is lost on churn of the meter
  - No ability of "gaining suppliers" to remotely access that meter (because of lack of Head End capability and commercial issues around continued use of the communications)
  - need for suppliers to develop multiple Head Ends and sign multiple communications contracts impacts on their will to roll-out pre-DCC
- For an energy supplier to operate a meter it needs
  - To exchange messages with a content and format (ie language) that the meter understands – this is why currently each meter needs to be connected to the correct head end
  - Standardise all messaging services i.e. provide for interoperability at the applications layer, to enable common head ends to be used?

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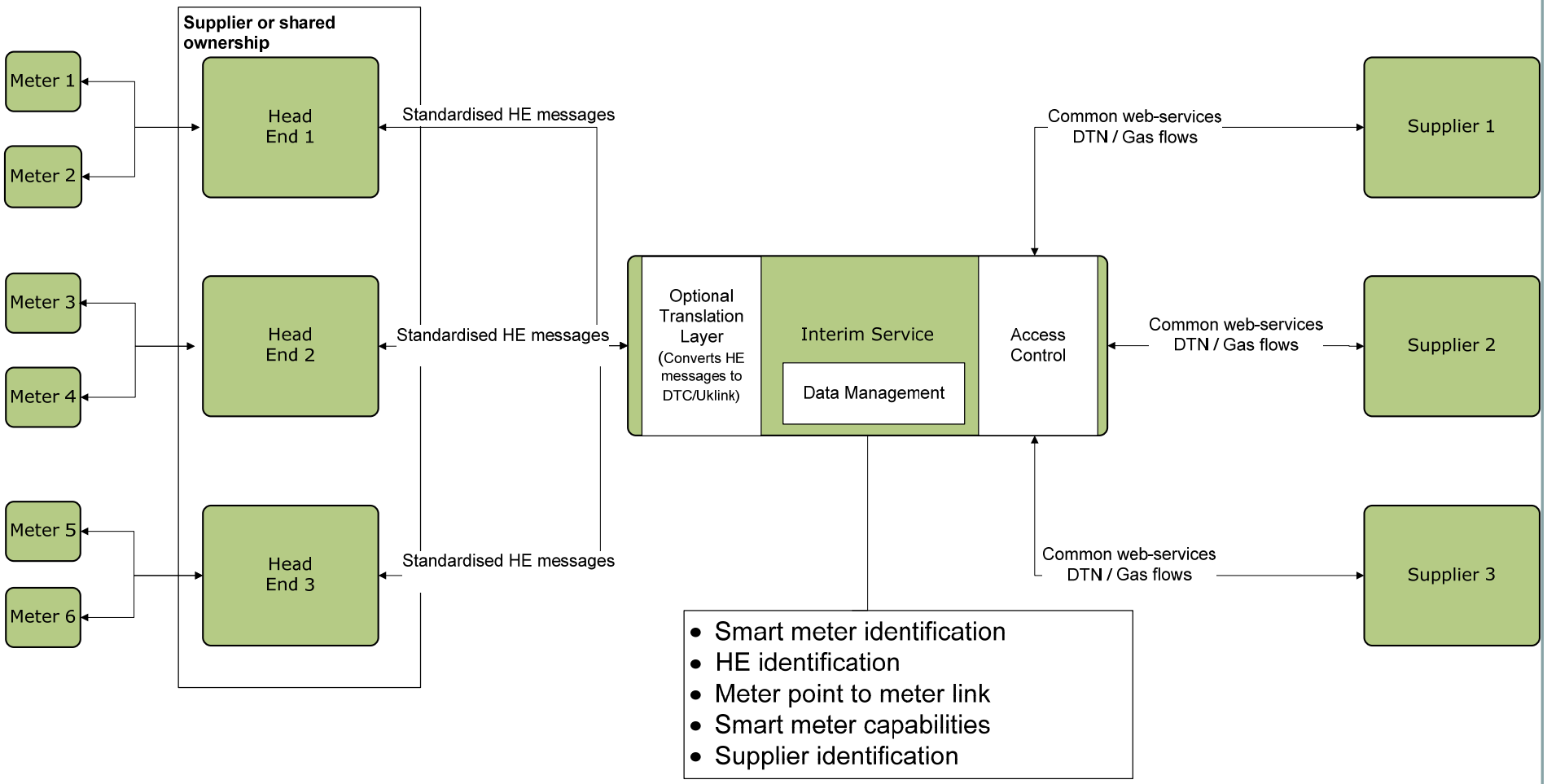
Example - Option 2 Standardise HE Services



Implementation Issues / Risks

- Governance and implementation
  - combination of statutory instruments (licence conditions) and self-governing arrangements
- Independence of DCC & competition risk
  - Important to consider potential unintended impacts on competition associated with enduring DCC solution, i.e. embed aspects of a sub-optimal solution
  - Potential mitigating actions – IP, systems, people to be retained by industry contracting agent
- Expectation that suppliers will contract for communications with appropriate novation or exit clauses
- Ability to “reuse” interim interoperability solutions :
  - All options offer only reduced functionality – currently not clear to what extent it will be practicable to “reuse” any of these in the enduring world

This Phase

- Stakeholder engagement through the Expert Groups and Community of Technical Experts
- Analysis and evaluation of Prospectus proposals
- Input into the Government Response
  - Along with responses to prospectus
- Next level of detail
  - Preparatory activity that feeds into the next phase of the Smart Metering Programme

Key Decisions Needed

- Initial Scope of DCC and timeframe for centralising meter registration
- DCC's establishment model (i.e. 2 tier approach to establishment)
- Interim Interoperability arrangements
- Roles and responsibility for equipment at the consumer premises
- DCC plan / timeframes to 'Go-Live'

Questions