Public

ELEXON – Code Consolidation Insight Study

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KEY POINTS AND ELEXON OBSERVATIONS NOTED IN RED

Project context

Ofgem/ BEIS Code Review

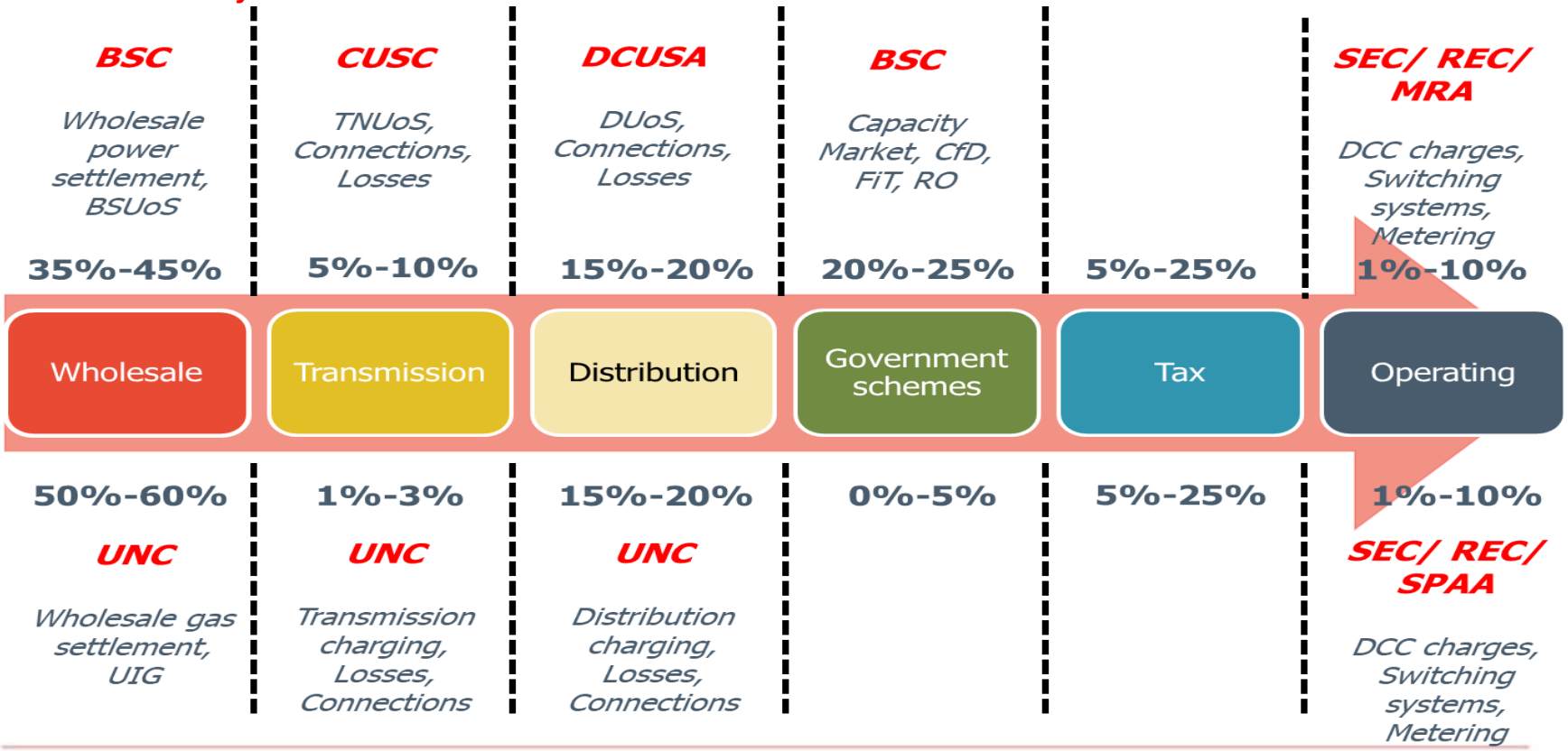
- Ofgem and BEIS launched a review of the current industry governance arrangements – the Energy Codes Review

- The aim of the review is to consider options for improving the existing arrangements, including scope for fundamental reform

- It identifies a number of limitations with the current Code structure, including that they are:
  - **Slow to implement decisions**, with even simple decisions often taking many years
  - **Reactive to existing problems**, rather than forward-looking in preparing the energy system for future changes
  - **Overly complex**, with the entirety of the Codes estimated to run to over 10,000 pages
  - **Resource-intensive**, leading to a lack of engagement from smaller and newer parties
  - **Lacking coordination** between the different Code bodies
  - **Fragmented**, with a large number of Code panels and bodies

Impact of industry Codes in the GB market

- The importance of the industry Codes to the energy industry can be seen in the domestic customer bill, where **Cornwall Insight estimates that 80-90% of the energy bill is contained within, linked to, or influenced by the industry Codes**



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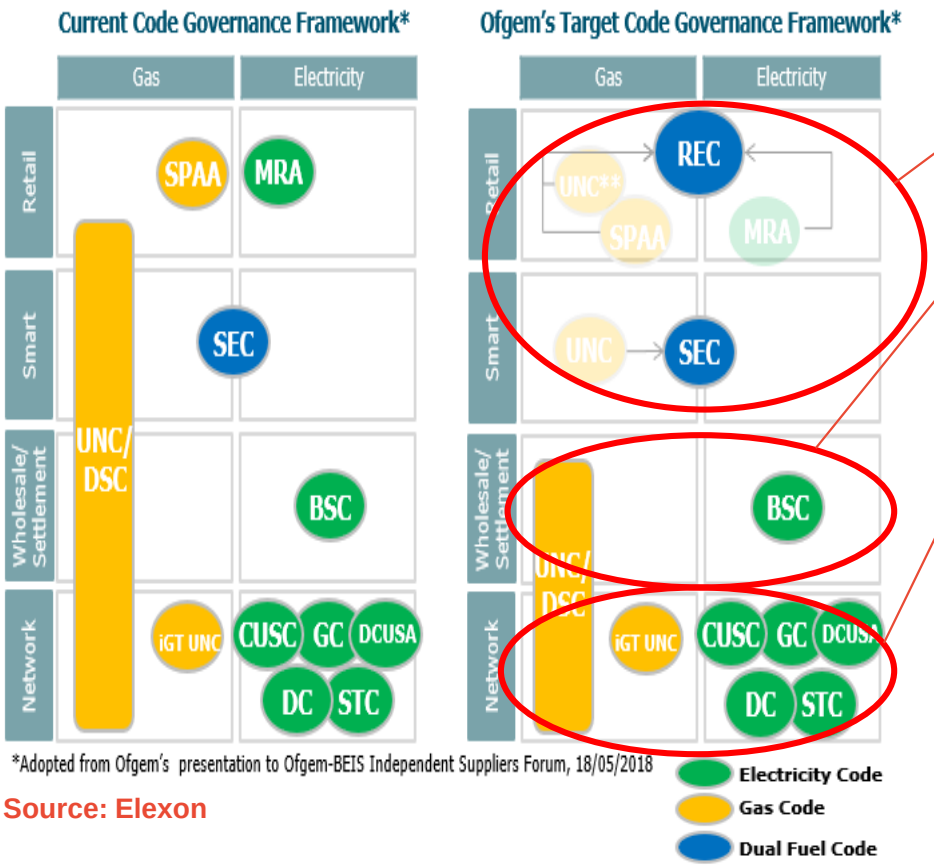
Current situation and focus of the Codes Review

Current Code governance situation

Three Codes horizontal model proposed by ELEXON



Source: Elexon

- Introduction of the SEC created the first cross fuel Code for the energy industry
  - Recognised that smart meters are an issue for both gas and electricity parties
  - Entirely new Code for a new industry area
- Under the Faster Switching Programme, another new dual fuel industry Code is being created – the REC
  - Designed to deliver the requirements for faster switching, but also encompassing other aspects of the retail market
  - Unlike the SEC, the REC impacts areas which are already covered by existing industry Codes – the SPAA, MRA, and elements of the UNC
  - Phased introduction that will eventually result in the consolidation of the other Codes into the REC

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Cornwall Study - Code modules

Code Modules – Standard Arrangements

Module	Purpose	Categories	Example signatories	Existing Codes
User Module	Module to cover the functions for users to accede to the Code, exit arrangements, qualifications for Code parties, and the definitions of Code terms	1. Accession 2. Qualifications 3. Definitions 4. Exit	The standard arrangements are likely to capture all market participants as they are intended to cover basic functions 1. Suppliers 2. Generators 3. Networks 4. Aggregators 5. Administrators 6. Agents 7. Non physical traders 8. System operators	1. All Codes
Governance Module	Module to deliver Code governance arrangements, including Panels, change management, voting, dispute management, and Code Administration functions	1. Governance Arrangements 2. Change Management 3. Dispute Resolution		1. All Codes
Data and Communications Module	Module for data and communications arrangements, including, data requirements, processing, submission and communication specifications and usage	1. Data 2. Communications		1. All Codes
Cost Recovery Module	Module for cost recovery functions, including charging methodologies, credit and collateral arrangements, arrangements for defaults against the charges, and risk management in relation to cost recovery	1. Funding and Charging Arrangements 2. Credit Provision 3. Arrangements for Party Default 4. Risk Management		1. CUSC 2. DCUSA 3. UNC 4. BSC 5. SEC *Note – Codes are those with charging functions, not admin cost recovery*

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Code Modules – Technical Ops

Module	Purpose	Categories	Example signatories	Existing Codes
System Operation Module	Module for the operation of the GB system and networks. Including system balancing and operational considerations, technical specification for equipment in relation to this, safety and security obligations of system arrangements, and planning and risk management functions	1. Safety and Security 2. Planning 3. Processes and Functions a) System Operation 4. Technical specifications 5. Risk Management 6. Agreements	1. Generators 2. Networks 3. Agents 4. Aggregators 5. System operators	1. Grid Code 2. Distribution Code 3. STC
Connection Module	Module covering connections to the GB system, including physical metering requirements	1. Connection to the GB network 2. Technical Specifications 3. Agreements	1. Generators 2. Networks 3. Agents	1. CUSC 2. DCUSA 3. UNC
Engineering Module	Module for the engineering and technical requirements for physical assets associated with the GB energy system	1. Technical Specifications 2. Safety and Security 3. Risk management	1. Networks 2. Generators 3. Agents	1. Grid Code 2. Distribution Code
Market Module	Module for all activities related with the delivery of the competitive wholesale market, including trading, settlement, metering data and reading, and imbalance	1. Processes and Functions a) Trading b) Settlement c) Metering d) Imbalance e) Unidentified Gas	1. Networks 2. Generators 3. Agents 4. Non physical traders 5. Suppliers	1. BSC 2. UNC
Retail Module	Module to deliver the competitive retail market and functions, predominantly customer switching, meter ownership and operations, and managing the risks relating to energy theft	1. Processes and Functions a) Switching b) Meter ownership and operations c) Risk management in relation to theft	1. Suppliers	1. REC 2. MRA 3. SPAA 4. SEC

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Potential Code structures

Potential Code Structures

Six potential Code models

- Six potential Code models have been considered as part of this work
- The models were chosen following discussions between Elexon and Cornwall Insight

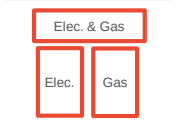
- **Horizontal alignment**
  - Three dual fuel Codes aligned with the market functions of wholesale and settlement, networks, and retail
  - Consistent with the current market activities and the general direction of Code development

- **Vertical alignment**
  - Two single fuel Codes delivering the full value chain for that fuel
  - Follows discussions by industry Panel's and workgroups

- **Single Code**
  - A single Code to deliver all functions within the industry, along the full value chain and both fuels
  - The greatest level of consolidation and simplification of all options

- **Upstream/downstream split**
  - Two dual fuel Codes split into downstream retail activities and upstream wholesale and settlement and system operation functions
  - Reflects the linkages between the wholesale market and system balancing in regards to data flows and operations

- **Framework agreement**
  - A single 'core' Code containing the standard Code functions, with specific 'arms' to deliver technical and specialist functions



- **Dual fuel downstream, single fuel upstream**
  - A dual fuel retail Code to maintain the REC/SEC dual fuel nature, and single fuel Codes for upstream network and market functions

Assessment of Code models

Assessment criteria

- **The six potential Code models have been assessed against the current baseline** (as delivered by the current 11 Codes)
  - Objective is not to determine the 'best' option, but to assess the strengths and weaknesses of the different structures and how current arrangements would map across
- The assessment criteria have been taken from the **Ofgem/ BEIS statements regarding what the future of Code governance and structure needs to deliver**
  - These have been chosen as they concisely define the key criteria for a future Code structure
  - For any change to Code structure, BEIS and Ofgem are the key decision makers, so alignment with their assessment framework is key
- **Structures have been assessed against the baseline as either:**
  - **Positive – the structure would deliver this key criteria noticeably better than the current situation**
  - **Neutral – the structure would not have a notable impact on this criteria compared to the current baseline, or the positive and negative impacts are expected to balance**
  - **Negative – the structure would be materially less suitable to deliver this criteria than the current situation**
- This assessment has not taken into account the potential impact of a single Code manager
  - This allows the assessment of the "core" functionality of the different potential Code structures
  - The impact a single Code manager may have on the arrangements is considered separately later in the report
- Cost and time to implement are considered to be outcomes as opposed to assessment criteria

Assessment criteria – Ofgem/BEIS approach

Criteria	Definition
1. Rules are clear and accessible	It should be easy for any market participant to understand which rules apply to them and what the rules mean for them
2. Regulatory framework facilitates timely change – both ad-hoc and systemic, and enables innovation	Energy sector rules are important and complex, and change must be carefully considered. However, in order to support the ongoing changes to the market, the regulatory framework should be: • Forward-looking and in line with wider industry/government strategic direction • Agile and responsive to change • Streamlined and coordinated, to enable transition to a clean, smart, and consumer led energy system
3. Right expertise driving rule design and change process	The regulatory framework needs to accommodate: • A larger and growing number of market participants • An increasingly diverse mix of market participants
4. Robust compliance monitoring and enforcement	With more and more diverse market participants joining an extremely inter - dependent system, compliance becomes increasingly important

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Assessment summary

Code model	Clear and accessible rules	Facilitates timely change	Expertise driven	Robust compliance	Overall
Horizontal alignment	Positive	Positive	Positive	Neutral	Positive
Vertical alignment	Negative	Positive	Negative	Neutral	Negative*
Single Code	Neutral	Neutral	Neutral	Positive	Neutral
Upstream/ Downstream Code	Positive	Positive	Positive	Neutral	Positive
Framework Code	Positive	Positive	Positive	Positive	Positive
Dual fuel retail, single fuel upstream	Positive	Neutral	Positive	Neutral	Neutral
+ Current situation	Negative	Negative	Negative#	Negative#	Negative

** Cornwall Insight assessed that the vertical alignment model turns overall neutral under a single code manager*

+ This is ELEXON's assessment of current situation, noting that those assessment criteria denoted # are not negative across all codes, but are over some

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Key findings and next steps

Key project findings – Code models

- Based on the review of the different potential Code structures, the following conclusions can be drawn:
  - The majority of Code structures examined would deliver industry wide benefits over the current baseline
    - This is a result of the reduced complexity of arrangements, clearer and more transparent rules for market parties, and increased Code coordination
  - However, a vertical Code structure does not appear to provide benefits over a horizontal or framework arrangement
    - Separation into separate fuels negatively impacts retail market delivery by separating the dual fuel REC and SEC
    - The potential size of whole value chain Codes, even for a single fuel, are likely to be unwieldly and difficult to manage
  - In addition to the Code consolidation, a single Code manager would also deliver benefits as a result of
    - Improved cross–Code/ fuel/ party coordination
    - Alignment and simplification of common functions across Codes
    - Improved risk management and compliance functions
    - Transparency and data usage improvements

Next steps and future deliverables

- This project has considered the initial structure and mapping of Code elements onto the potential simplification arrangements
  - This is to support Elexon, BEIS, and Ofgem in identifying a preferred option and analysing the different routes forwards
- Following the choice of preferred option(s) a second research phase should be undertaken to develop the detailed considerations of the chosen model, including:
  - **Governance structure** – preferred Code Administrator and Panel membership and operating arrangements
  - **Voting and signatories** – how are the voting arrangements determined for significantly wider Codes
  - **Code administrator funding model** – to what level will the Code be funded in order to provide support and administration functions, and how will this be recovered from parties
  - **Change management** – how will the change control process be delivered, are there limits on alternatives, what level of support will be provided by Code Administrators
  - Examples/scoping of simplification within current Code sections to demonstrate approach
- Additional research also needed to quantify the potential costs of implementation against cost savings – from simplified systems and reduced resource requirements

ELEXON observations/takeaways

- The **consolidation exercise is achievable**, when considered against other governance projects that have been undertaken:
    - The introduction of the Retail Energy Codes (consolidating the MRA, SPAA and retails parts of the UNC)
    - The creation of the gas Data Services Contract (DSC) and changes to the UNC, Agency Services Agreement and associated agreements (18 months)
- **Code and code body consolidation is a first step to simplification** and coupled with the ELEXON proposed user portal*, could make a significant difference to market participants
- All of the models analysed by Cornwall Insight have **benefits over the baseline**, when considered against the outcomes that Ofgem and BEIS are looking for from the Codes Review
- There is a real opportunity for Ofgem/BEIS and the industry to **transform the energy market management** and operation, using **consolidation and simplification** of the codes as a firm foundation to **future proof arrangements** for the benefit of the market and consumer

ELEXON believes that we have a once in a generation opportunity to change the way the industry is governed, creating flexibility to incorporate future energy solutions and business models

** As set out in the ELEXON Policy View: The Energy Codes Review document, published May 2019*