

# Innovation and the governance of energy industry codes

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New Thinking For Energy



# Energy industry codes

- ‘the contractual arrangements that underpin the operation of the electricity and gas industry arrangements’ Ofgem (2015)

Area	Title	Description
Electricity distribution	<b>Distribution Code (D-Code)</b>	Technical parameters relating to the planning and use of electricity distribution networks
	<b>Distribution Connection and Use of System Agreement (DCUSA)</b>	Covers commercial aspects of use of electricity distribution network services
Electricity transmission	<b>Connection and Use of System Code (CUSC)</b>	Framework for connection and use of high voltage transmission system and certain balancing services
	<b>Grid Code</b>	Technical aspects relating to connections, operation & use of transmission network
	<b>System Operator/Transmission Code (STC)</b>	Defines the relationships between National Grid as system operator and transmission owners
Electricity balancing	<b>Balancing and Settlement Code (BSC)</b>	Sets out rules for participating in Balancing Mechanism and for settling energy imbalance
Electricity retailing	<b>Master Registration Agreement (MRA)</b>	Rules for retail market processes including electricity registration, change of supplier processes and the Green Deal
Gas transmission and distribution	<b>Unified Network Code (UNC)</b>	Defines the rights and responsibilities for users of the gas transportation systems, and provides for all system users to have equal access to transportation services
Gas retailing	<b>Supply Point Administration Agreement (SPAA)</b>	Sets out the inter-operational arrangements between gas suppliers and transporters in the UK retail market
Gas and electricity smart metering	<b>Smart Energy Code (SEC)</b>	<b>Defines the rights and obligations of energy suppliers, network operators and other relevant parties involved in the end to end management of smart metering in Great Britain.</b>

# Code governance

- Pre-2008 - Principle of 'self-authored regulation': industry initiates and drafts modifications, Ofgem has veto power
- Post-2008 - Amended principle:

<b>Modification procedure</b>	<b>Initiation</b>	<b>Development</b>	<b>Decision</b>
Self-governance (fast-track and regular)	Industry	Industry	Industry
Ordinary	Industry	Industry	Ofgem
SCR	Ofgem	Ofgem first then industry	Ofgem

Source: CMA

# Codes and innovation

- Context of policy and technological change, including: increase in variable renewables; decentralised generation; DSR; storage; local markets?; DSOs?; electrification of transport etc.
- ‘The GB energy industry is undergoing a period of significant change, driven not only by the need to tackle climate change but also by factors such as technological development ...If self-regulation fails to ensure that industry codes keep pace with market developments and wider policy objectives, then it is possible that these industry codes become a barrier to pro-competitive change and/or innovation.’ (CMA 2015)
- Need for:
  - non-incremental changes in content across multiple codes
  - governance system that facilitates the participation of innovative new entrants

# Problems with code governance 1: Complexity and fragmentation

- **High fixed cost of compliance**
  - ~10,000 pages of documentation
  - Separate ICT requirements, process rules, reporting arrangements, credit and collateral requirements (higher for smaller, new entrants) for each code
  - Frequent code modifications (327 to BSC since 2010)
- **High fixed costs of governance participation**
  - Frequent meetings (150 panel/board meetings a year, plus workgroups)
  - In-depth technical knowledge required
  - Rules about raising mods, alternates + reporting formats differ across codes
- **Deterrence of new entry and risk of incumbent capture**

# Problems with code governance 2: Structural dominance by incumbents

Number of panel/board members by category, October 2015

	MRA	BSC	DCUSA	CUSC	D Code	Grid code	SPAA	UNC	SEC
VI supplier-generator	2	1	2	4	3	3	4	2	2
Network company	1	2	3	2 <sup>b</sup>	6	10	2	5	2
Other Code rep.	1	0	0	0	0	2 <sup>c</sup>	0	0	0
Other supplier	0	0	0	0	0	0	1	3	2
Other generator	0	1	1	2	1	3	0	0	0
Other network	0	0	0	0	1	0	1	0	0
Independent	0	8 <sup>a</sup>	0	2 <sup>a</sup>	3 <sup>a</sup>	2	0	1	4
Consumer rep.	0	2	0	1	1	0	0	1	1 <sup>d</sup>
Total	4	12	6	11	15	20	8	12	11
<b>% VI</b>	<b>50%</b>	<b>8%</b>	<b>33%</b>	<b>36%</b>	<b>20%</b>	<b>15%</b>	<b>50%</b>	<b>17%</b>	<b>18%</b>
<b>% VI + network</b>	<b>75%</b>	<b>25%</b>	<b>83%</b>	<b>55%</b>	<b>60%</b>	<b>65%</b>	<b>75%</b>	<b>58%</b>	<b>36%</b>
Independent chair	No	Yes	No	Yes	No	No	No	Yes	No

# Problems with code governance 3:

## Difficulties in coping with major change

- Codes governance system not well designed for non-incremental change, across multiple codes
  - e.g. DSR will require changes to DCUSA, D-Code, ER P2/6, BSC, CUSC)
- Code objectives focus on ensuring effective competition, cost-reflexivity and consistency with European regulation; no environmental objectives (except SEC)
- Contrast with government policy and Ofgem remit
- **Impossible to get panel recommendation for mod based directly on furthering interests of consumers and promoting sustainability**
  - e.g. CUSC mod CAP148 aimed at supporting renewable policy rejected

# Reform history

- **2008 Code Governance Review**
  - Significant Code Reviews
  - Code Administration Code of Practice
- **2014-16 CMA Energy Investigation reforms**
  - Ofgem to produce strategic direction/workplans
  - Ofgem to have power to initiate, prioritise or take over modifications
  - Code administration to become licensed activity
- **2015-16 Ofgem further review proposals**
  - Ofgem to have power to raise and develop modification itself
  - Changes to code administration, including forward work plans, mod register to allow cross-code coordination



# Balance of effects of self-authored regulation

- Minimising regulatory risk
- Informational efficiency

- Regulatory capture
- Informational capture
- Regulatory inertia



# Alternative reform agenda

- End self-authored regulation and relocate code governance in public body
- Rule-based mandate with clear and transparent links to policy to contain regulatory risk
- Robust and transparent consultation and decision-making rules
- To address informational asymmetry problem, relocate from Ofgem to dedicated specialist code management body with technical expertise
- Could also house and coordinate code administration functions
- Retain robust right of appeal via CMA and courts