

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	Distribution Code (D-Code)	Technical parameters relating to the planning and use of electricity distribution networks
	Distribution Connection and Use of System Agreement (DCUSA)	Covers commercial aspects of use of electricity distribution network services
Electricity transmission	Connection and Use of System Code (CUSC)	Framework for connection and use of high voltage transmission system and certain balancing services
	Grid Code	Technical aspects relating to connections, operation & use of transmission network
	System Operator/Transmission Code (STC)	Defines the relationships between National Grid as system operator and transmission owners
Electricity balancing	Balancing and Settlement Code (BSC)	Sets out rules for participating in Balancing Mechanism and for settling energy imbalance
Electricity retailing	Master Registration Agreement (MRA)	Rules for retail market processes including electricity registration, change of supplier processes and the Green Deal
Gas transmission and distribution	Unified Network Code (UNC)	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	Supply Point Administration Agreement (SPAA)	Sets out the inter-operational arrangements between gas suppliers and transporters in the UK retail market
Gas and electricity smart metering	Smart Energy Code (SEC)	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.

Code governance

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

Modification procedure	Initiation	Development	Decision
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 ^b	6	10	2	5	2
Other Code rep.	1	0	0	0	0	2 ^c	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 ^a	0	2 ^a	3 ^a	2	0	1	4
Consumer rep.	0	2	0	1	1	0	0	1	1 ^d
Total	4	12	6	11	15	20	8	12	11
% VI	50%	8%	33%	36%	20%	15%	50%	17%	18%
% VI + network	75%	25%	83%	55%	60%	65%	75%	58%	36%
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