

<b>Title:</b> Consultation of reforming the energy industry codes <b>RPC Reference No:</b> <b>Lead department or agency:</b> BEIS <b>Other departments or agencies:</b> Ofgem	<b>Impact Assessment (IA)</b>			
	<b>Date:</b> 22 July 2019			
	<b>Stage:</b> Consultation			
	<b>Source of intervention:</b> Domestic			
	<b>Type of measure:</b> Primary legislation			
<b>Contact for enquiries:</b> <a href="mailto:emma.smith@beis.gov.uk">emma.smith@beis.gov.uk</a>				

<b>Summary: Intervention and Options</b>	<b>RPC Opinion:</b>
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Cost of Preferred (or more likely) Option				
Total Net Present Value	Business Net Present Value	Net cost to business per year	One-In, Three-Out Not in scope	Business Impact Target Status Non qualifying provision

**What is the problem under consideration? Why is government intervention necessary?**

Many of the detailed rules that facilitate the gas and electricity markets are set out in 'codes' or rules governed by industry-led processes and overseen by Ofgem. These codes have set the rules of the industry post-privatisation, drawing on the expertise and engagement of industry parties to play a vital role in keeping the lights on, our businesses running, and our homes warm. But the gradual evolution of code governance has left the overall framework fragmented, complex and poorly co-ordinated, with weak incentives to drive timely change. Processes and accountabilities that may have been appropriate when individual codes were established, may no longer be best suited and may hinder the transition towards a more flexible energy system with net zero emissions.

**What are the policy objectives and the intended effects?**

The aim of the policy is to ensure that the codes promote effective competition and keep pace with technical and commercial developments in GB energy markets to enable innovation, consistent with BEIS and Ofgem's strategic objectives and policies. The policy could create a new function to take account of the Government's vision for the energy system and translate it into a strategic direction for codes, enhance the role currently carried out by code administrators to create empowered code managers to develop the strategic direction into specific code changes, move away from industry governance for major strategic decisions on codes, simplify and consolidate codes.

**What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)**

**Option 0** - Do nothing - Under this option, there are no changes to codes or code governance from the current set up (no strategic function and six code administrators for eleven energy codes)

**Option 1** - A code manager function and a separate 'Strategic Body': A strategic function is created, the role of code administrators is enhanced and the number of organisations administering the codes is reduced, codes are simplified and consolidated. In this option the strategic body is a separate organisation from the code manager function.

**Option 2** - An 'Integrated Rule Making Body' (IRMB): A combined code management function and strategic body

<b>Will the policy be reviewed? If applicable, set review date:</b>				
Does implementation go beyond minimum EU requirements?			No	
Are any of these organisations in scope?			<b>Micro</b> Yes	<b>Small</b> Yes
			<b>Medium</b> Yes	<b>Large</b> Yes
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)			<b>Traded:</b> NA	<b>Non-traded:</b> NA

**I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.**

Signed by the responsible Minister  Date: 22/07/19

# Summary: Analysis & Evidence

# Policy Option 1

## Description:

### FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low:	High:	Best Estimate:

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	N/A	N/A	N/A
High	N/A	N/A	N/A
Best Estimate	N/A	N/A	N/A

#### Description and scale of key monetised costs by 'main affected groups'

It has not been possible to quantify the costs of this option at this stage.

#### Other key non-monetised costs by 'main affected groups'

There would be transitional costs from the establishment of a strategic function, consolidating the codes, moving responsibilities from code administrators to new code managers and familiarisation costs for participants. There would be ongoing costs from the operation of the strategic function and potentially additional operational costs from the extra responsibilities of code managers, although this could be somewhat offset by the reduction in the number of organisations.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	N/A	N/A	N/A
High	N/A	N/A	N/A
Best Estimate	N/A	N/A	N/A

#### Description and scale of key monetised benefits by 'main affected groups'

It has not been possible to quantify the benefits of this option at this stage.

#### Other key non-monetised benefits by 'main affected groups'

- Increased accountability of code managers and more effective code administration
- Fewer code administrators may reduce the cost of managing codes and reduce the administrative burden on industry of engaging with multiple bodies
- Better project management of code modifications
- Delivery of required changes to the system benefitting those impacted by the code, e.g. consumers

#### Key assumptions/sensitivities/risks

Discount rate

3.5

Costs and benefits of this option have only been analysed qualitatively due to the early stage of this proposal. Due to the variety of potential sub options, the final set of costs and benefits remains uncertain.

### BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs:	Benefits: 0	Net:	

# Summary: Analysis & Evidence

# Policy Option 2

Description:

## FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low:	High:	Best Estimate:

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	N/A	N/A	N/A
High	N/A	N/A	N/A
Best Estimate	N/A	N/A	N/A

### Description and scale of key monetised costs by 'main affected groups'

It has not been possible to quantify the costs of this option at this stage.

### Other key non-monetised costs by 'main affected groups'

There would be transitional costs from the establishment of the integrated rule making body, consolidating the codes, moving responsibilities from code administrators to the rule making body and familiarisation costs for participants. There would be ongoing costs from the operation of the strategic function and potentially additional operational costs from the extra code management responsibilities, although this could be somewhat offset by the reduction in the number of organisations

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	N/A	N/A	N/A
High	N/A	N/A	N/A
Best Estimate	N/A	N/A	N/A

### Description and scale of key monetised benefits by 'main affected groups'

It has not been possible to quantify the benefits of this option at this stage.

### Other key non-monetised benefits by 'main affected groups'

- Increased accountability of code managers and more effective code administration
- Fewer organisations managing codes may reduce the cost of the code governance system and reduce the administrative burden on industry of engaging with multiple bodies
- Better project management of code modifications
- Delivery of required changes to the system benefitting those impacted by the code, e.g. consumers

### Key assumptions/sensitivities/risks

Discount rate

3.5

Costs and benefits of this option have only been analysed qualitatively due to the early stage of this proposal. Due to the variety of potential sub options the final set of costs and benefits remains uncertain.

## BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs:	Benefits: 0	Net:	

# Evidence Base (for summary sheets)

## Background

1. This consultation stage IA provides an assessment of the impact of the proposal to introduce legislative changes with primary legislation to the governance structure of industry codes which governs Great Britain's (GB's) electricity and gas market.
2. Much of the operation of the electricity and gas market is underpinned by technical and commercial codes. The industry codes serve to collate the technical standards and commercial terms and conditions that apply to gas and electricity market participants. They are multi-party agreements, which standardise the commercial requirements applicable to all industry participants. There are currently 11 codes made up of more than 10,000 pages of text with 6 code bodies with varying governance and ownership arrangements. Each code has a *code owner*, with responsibility for having the code in place; a *code administrator* responsible for the day-to-day running of the code; and a *code panel* made up of industry parties who oversee the operation of the code and any modifications. In order to maintain an efficient industry framework the codes need to change over time; the modification varies across different codes.
3. The proposed codes in scope of this reform are the:
  - National Grid Electricity System Operator (NGESO) codes (CUSC, GC, STC) and the non-NGESO codes (BSC, MRA, DCUSA, DC, SEC, UNC, SPAA, iGTUNC). This would also, in future, include the REC.<sup>1</sup>
  - Smart metering (delivered by the data and communications company - DCC), Gas (delivered by Xoserve) and Electricity (delivered by Elexon) central systems delivery functions.
4. The costs of the current code administration system are uncertain. Some code administrators also carry out delivery functions as well as other business aspects, making it difficult to isolate the costs of code administration.
5. There are some external estimates, which inevitably vary slightly. In British Gas's response to Ofgem's 2015 open letter on the further review of industry code governance<sup>2</sup> they estimate the costs to customers across the industry of the code administration of the MRA, BSC, DCUSA, UNC, SEC and SPAA for 2015 significantly exceed £10m. Based on this estimate, a 2017 research paper from the University of Exeter<sup>3</sup> extrapolated the total cost of running the code administration system to be in the order of £20m-£25m a year. Companies House records<sup>4</sup> of the organisations administering SPAA, DCUSA, MRA and SEC show aggregated costs of £21m for 2018. Each of these estimates covers only the direct costs arising from code administration, not their wider impact on industry participants.

## Rationale for intervention

6. In June 2016, the Competition and Markets Authority (CMA) published its Energy Market Investigation Final Report<sup>5</sup>. It identified the current system of code governance as a barrier to pro-competitive changes, such as faster supply switching for consumers, and concluded that it is inadequate for delivering major reforms that might be necessary to implement policy decisions or

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<sup>1</sup> Connection and use of system code (CUSC); grid code (GC); system operator – transmission owner code (STC), balancing and settlement code (BSC), meter registration agreement (MRA); distribution connection and use of system agreement (DCUSA); distribution code (DC); smart energy code (SEC); uniform network code (UNC); supply point administration agreement (SPAA); independent gas transporter uniform network code (igtUNC); retail energy code (REC).

<sup>2</sup> [https://www.ofgem.gov.uk/sites/default/files/docs/2015/07/british\\_gas\\_response\\_2\\_0.pdf](https://www.ofgem.gov.uk/sites/default/files/docs/2015/07/british_gas_response_2_0.pdf)

<sup>3</sup>

<https://ore.exeter.ac.uk/repository/bitstream/handle/10871/28455/Governance%20of%20industry%20rules%20and%20%20energy%20system%20innovation.pdf?sequence=1>

<sup>4</sup> <https://beta.companieshouse.gov.uk> (Company numbers 04365599, 05812381, 08430267 and 03490321)

<sup>5</sup> Energy market investigation: Final Report, CMA

<https://assets.publishing.service.gov.uk/media/5773de34e5274a0da3000113/final-report-energy-market-investigation.pdf>

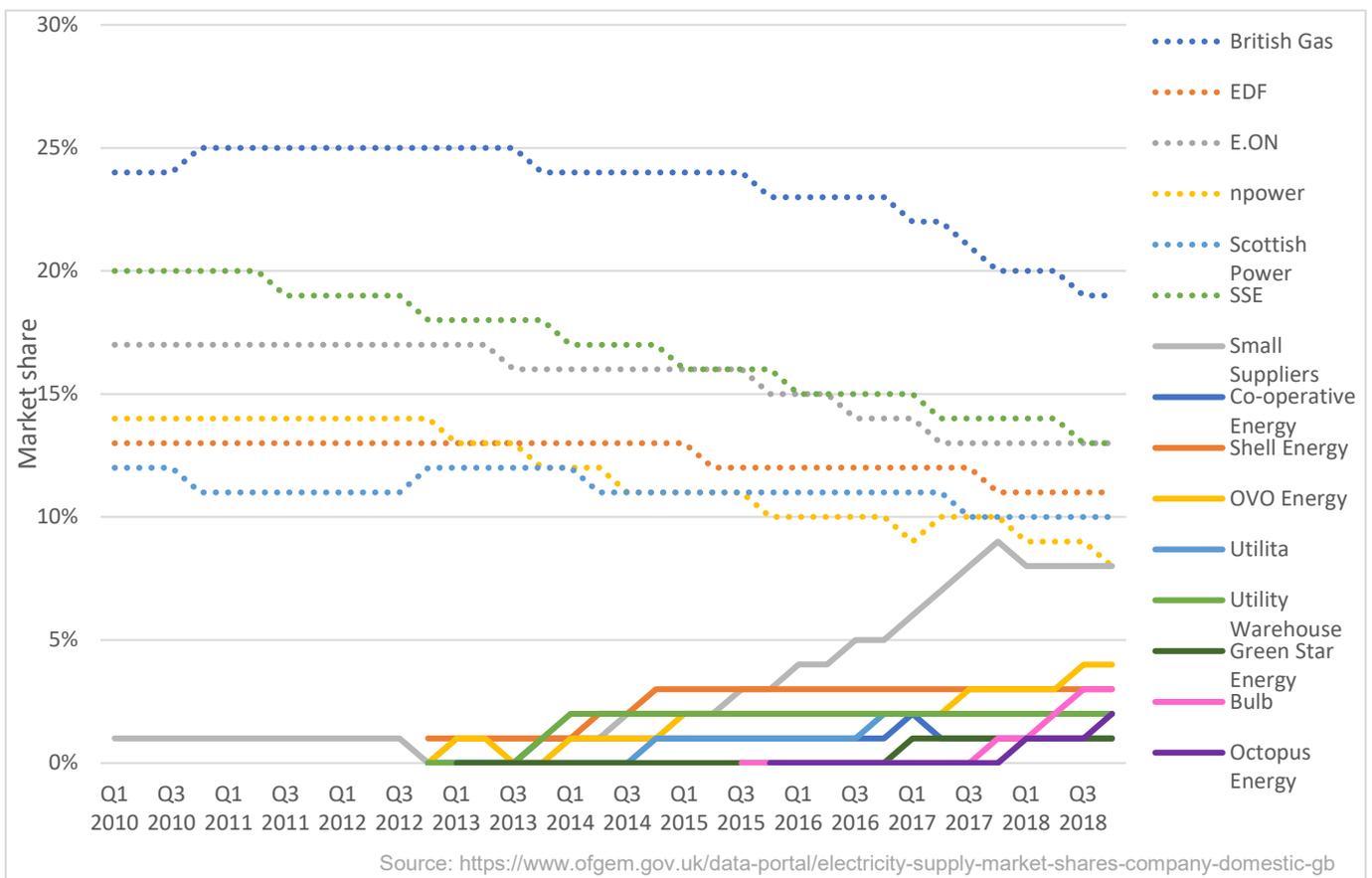
support innovation on a timely basis This holds back energy sector innovation, and transition to a cleaner, smarter energy system

7. During the course of its investigation, the CMA recognised that codes contain technical and commercial provisions which require detailed knowledge of the industry, and therefore that industry-led regulation is appropriate to govern and modify such rules in the majority of cases. However, it also noted drawbacks of how existing arrangements work, including how existing governance and modification arrangements have failed to ensure important modifications which benefit consumers and/or competition.
8. The CMA also noted that existing arrangements have created material burdens on industry participants, particularly smaller ones, and this could undermine their incentives or ability to promote change. All code parties face the cost of monitoring changes in government policy, regulation and industry code developments. However, the fixed costs of compliance are more of a burden for new entrants and smaller parties with smaller customer bases over which to spread these costs. Further costs are involved if a party wishes to try to influence any such changes. The CMA's evidence found that smaller parties did not have the resources to be involved in every modification or even to suggest modifications themselves. For example, Ofgem has estimated that there are around 150 industry panel-type meetings per year, and on average, each modification proposal may require around four working groups (more complex changes will require significantly more)<sup>6</sup>.
9. In addition, the CMA found that there are 11 fragmented, complex sets of rules, each with different and un-coordinated arrangements, **creating a significant barrier to entry** and increasing the cost of participating in the market for new entrants such as small generators, aggregators and other innovative business models.
10. The Code Administrators, responsible for code governance, are funded by and accountable to industry. In the CMA's view, they lack powers and incentives to improve the change process and overcome incumbent power. In BEIS's view, the existing arrangement can give rise to a Principal/Agent problem between Ofgem/BEIS (the principal) and industry participants (the agent) who need to implement code modifications. The incentives of the agent might not be aligned with those of the principal. This is an example of an **imperfect information market failure**. While a specific policy change requiring modifications to industry codes would generate wider benefits to the market, individual industry participants might not directly benefit from such a policy change and therefore have weaker incentives to implement it.
11. The CMA is concerned that Ofgem has insufficient ability to influence the development and implementation of modification proposals, and that Ofgem is unable to ensure that industry codes keep pace with market developments or wider policy objectives.
12. Without significant reform, modifying codes will remain a lengthy process under the current code governance process. The framework was designed around a market structure of the past – where a small number of relatively similar, large and well-resourced participants were able to reach consensus on rule changes. The benefit of this consensus-based process was that the decision should be acceptable to all group members and have strong support for implementation. But in recent years, particularly with the move to a smarter, more flexible system, the number and diversity of market participants has increased. Conflicting commercial priorities can paralyse the consensus-based decision-making process, meaning that change is slow.
13. The recent rise of small electricity suppliers is an example of the changing market structures. The dashed lines in the chart below show the large incumbent energy suppliers ('big six') have lost market share in recent years, from almost 100% of the market in 2010 to 74% of the market in 2018. A variety of smaller suppliers have entered the market using new business models beyond the traditional role of a supplier of just supplying electricity and gas. For example, Utilita, Ovo Energy and Octopus Energy offer smart home solutions such as electric vehicle or battery storage integration alongside specific tariffs.

#### GB domestic electricity supply market shares by company

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<sup>6</sup> See CMA working paper on codes: <https://assets.publishing.service.gov.uk/media/54f730f140f0b61407000003/Codes.pdf>



14. Increasingly, policy solutions require a whole-system perspective and changes across multiple codes (e.g. Faster Switching, Half-Hourly Settlement). Further, there is growing industry consensus that action is necessary to create a regulatory framework capable of delivering the changes required to move to a clean, smart and consumer-led energy system, in line with the Industrial and Clean Growth Strategies.

## Policy objective

15. The aim of the policy is to ensure that the codes promote effective competition and keep pace with technical and commercial developments in GB energy markets, consistent with BEIS and Ofgem’s strategic objectives and policies. We have identified four areas for reform that we consider will improve the existing arrangements:

- **Providing strategic direction:** ensuring the regulatory framework is forward looking and is informed by the Government’s vision for the energy system. We propose creating a new function that can take account of that high-level vision and translate it into a strategic direction for codes that promotes the interests of consumers. This is intended to address the current fragmentation and lack of co-ordination between the codes.
- **Empowered and accountable code management:** a mechanism for ensuring that the strategic direction is delivered through appropriate changes to codes and that these changes are progressed in a clear and logical manner across codes. We consider this could be achieved through the creation of an empowered ‘Code Manager’ function that has the right expertise, resources and powers to oversee the change process; monitor compliance with code obligations and decide on appropriate measures in the event of non-compliance.
- **Independent decision-making:** rebalancing decision-making away from industry control, to arrangements that are agile and responsive to change and work in the interests of

existing and future customers, where the right incentives drive the design of rules and systems, while continuing to draw on industry input and expertise.

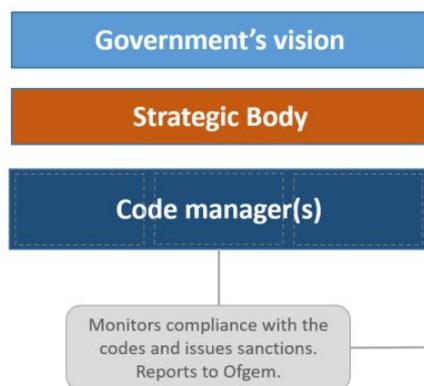
- **Code simplification and consolidation:** to improve accessibility: simplify and consolidate codes, removing unnecessary content, and ensuring codes are suitably adaptive to a changing industry. This could enable innovation and lower barriers to entry by making codes clearer, more transparent, and accessible. Fewer and simpler codes would also be easier to rapidly change in response to strategic priorities.

Options considered

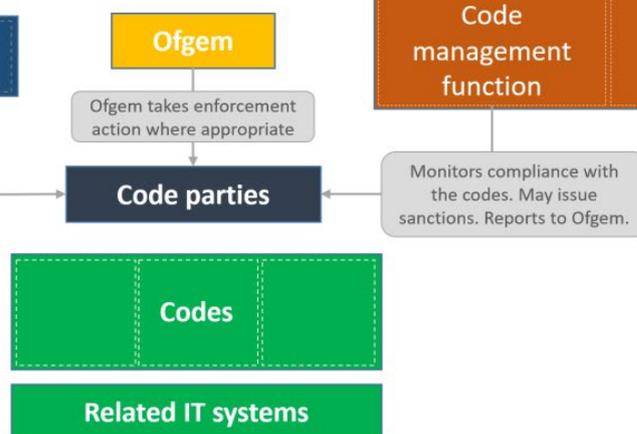
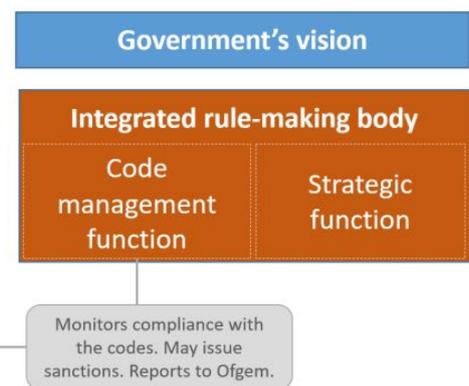
16. Two potential models have been considered in the consultation, relative to the ‘do nothing’ counterfactual. These two models both incorporate the four areas for reform discussed in the previous section – providing strategic direction, empowered and accountable code management, increasing independence of decision making and consolidating codes – but they have different models for the governance structure.
  - **‘Do nothing’:** Under this option no changes are made to the existing regulatory framework for code governance. As the status quo is maintained, no additional costs or benefits are generated from this option. The code modification routes would remain as they currently are, acting as a barrier to pro-competitive innovation and improvements and failing to ensure important modifications, which benefit consumers, are developed and implemented efficiently
  - **Option 1 - Code manager function and a Strategic Body:** In this option the strategic body is a separate organisation from the code manager function. The code manager(s) are held accountable for delivering on the strategic steer, which is outlined by the strategic body, which would be accountable in turn to Parliament, Government or another appropriate body (such as Ofgem).
  - **Option 2 - Integrated Rule Making Body (IRMB):** In this option the strategic function and the code management function are combined in one single organisation, the IRMB. This would allow scope for greater co-ordination between the strategic function and the code managers. This body could be accountable to parliament, Government or another appropriate body (such as Ofgem).

**Parliament, Government or another appropriate body**  
Overall accountability for strategic body or integrated rule-making body

**Model 1: code managers and a strategic body**



**Model 2: integrated rule-making body**



17. We have assessed the impacts against the baseline of the status quo.

## Monetised and non-monetised costs and benefits of each option

### Establishment of a strategic function (applies to both Options 1 and 2)

18. The proposal is to create a new strategic function for the energy codes. This function could either sit separate to the code managers in a strategic body (in Option 1) or integrated in one organisation (with the code managers) – an Integrated Rule Making Body (in Option 2).

### Benefits

19. At present, there is a disconnect between the development of energy policy by the government and the updating of energy sector codes by industry. The CMA highlight the absence of ‘strategic principles’ for identifying and prioritising code modifications important to consumers’ interests under the existing code governance and modification arrangements.<sup>7</sup>
20. While tools such as the Significant Code Review (SCR)<sup>8</sup> have been used in the absence of alternatives for delivering strategic code change, the SCR process is heavily resource intensive and has been used sparingly as a result. An established strategic function would enable industry codes to more closely align with Government policy, delivering, for example, decarbonisation and consumer protection objectives by proactively identifying and prioritising relevant modification changes. The strategic function could also help co-ordinate and lead cross-sector reforms, where strategic priorities are complex and cut across multiple areas of the energy system.
21. Ofgem set out upcoming changes and the likely impact on codes in their initial consultation on code governance remedies<sup>9</sup>. “New technologies, new business models and new ways of running the energy system are emerging. These innovations may help us move to a low carbon system that is both secure and affordable. They will also be important for enabling our vision for smarter markets where consumers are more engaged and empowered. But the existing industry code governance framework may be preventing these innovative ideas from coming to fruition, especially where they require significant changes to existing arrangements, and where they are not aligned with certain industry interests.” The current code governance framework makes sense where only small-scale changes are needed to keep the rules and systems fit for purpose, where the composition of the industry is homogenous, and interests are largely aligned. The proposed framework will be much better able to deal with the significant industry change that we anticipate in the years ahead.
22. Comparing the benefits of the strategic function under Options 1 and 2, Option 1 has the advantage of creating clearer accountability and division of responsibility between the strategic body and the code manager(s). However, Option 2 could lead to greater co-ordination and collaboration between the strategic and code management functions, enabling the provision of a clear directional steer in the early phase of a code modification proposal. This could lead to a faster code modification process and reduce the incidence of significant resource being devoted to detailed assessments of proposals which are ultimately rejected (Ofgem has rejected around 60 modifications over the last 5 years).

### Costs

23. The establishment of a new body to undertake the strategic function would incur both initial set-up costs and ongoing operating costs. There is no strategic function in the current system so both the initial and ongoing costs represent additional costs to the status quo. The set-up costs include the costs of designing the strategic body and setting out its role, recruitment and building up expertise. The operating costs would include elements such as salaries, travel and IT costs. The scale of the cost of the strategic body very much depends on its level of activity in initiating strategic code changes (akin to the existing SCR process in Ofgem) and the split of decision making between industry, the code manager(s) and the strategic body.

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<sup>7</sup> CMA Appendix 10.4 – Reform of Code Governance

<sup>8</sup> The Significant Code Review (SCR) process provides a tool for Ofgem to initiate wide ranging and holistic change and to implement reform to a code based issue. Further guidance on the SCR process can be found here <https://www.ofgem.gov.uk/publications-and-updates/ofgem-guidance-launch-and-conduct-significant-code-reviews>

<sup>9</sup> See [https://www.ofgem.gov.uk/system/files/docs/2016/11/industry\\_code\\_governance\\_-\\_initial\\_consultation\\_on\\_implementing\\_the\\_competition\\_and\\_markets\\_authority\\_recommendations.pdf](https://www.ofgem.gov.uk/system/files/docs/2016/11/industry_code_governance_-_initial_consultation_on_implementing_the_competition_and_markets_authority_recommendations.pdf)

24. The costs will depend on where the strategic body sits, potential options considered in the consultation are Ofgem, the Electricity System Operator (ESO) or a new independent body. All of these options would require additional funding, but costs will differ depending on the extent to which the strategic body can share existing organisations' corporate functions and how much structural change would be required to accommodate the proposed new powers and responsibilities.
25. We do not expect a significant difference in set-up costs of the strategic function between Option 1 and Option 2. However ongoing costs could be lower under Option 2. While the staff level required is likely to be similar under Options 1 and 2, Option 2 may have lower overhead costs (for example a single IT system or HR department) if they can be split across all code management and strategic functions in the single IRMB.
26. At this stage it is not possible to quantify the costs of the new body as there are many outstanding uncertainties including where the strategic function would sit, what its precise duties would be, how detailed the strategic direction should be, how it should be communicated, and what mechanisms should be used to ensure strategic direction is implemented and followed. All of the uncertainties outlined make it hard to determine how large the strategic function would need to be and how much it would cost.

### **Code consolidation (applies to both Options 1 and 2)**

27. The proposal is to consolidate the existing eleven gas and electricity codes to a smaller number by rationalisation and simplification. Various approaches are considered as to how codes are consolidated:
  - Consolidation into one unified single code
  - Consolidation into three codes structured by industry activity type (dual fuel<sup>10</sup> for retail, wholesale and networks)
  - Consolidation into three codes structured partially by fuel and by industry type (dual fuel for retail, remaining codes split across electricity and gas)
28. This is also an opportunity to reduce the length of code documentation through:
  - Rationalisation: streamlining undue detailed prescription and removing any irrelevant or outdated information.
  - Simplification: Translating code requirements (where possible) from technical prescriptions into plain English and establishing principle-based regulation into new rule design.
29. Currently codes are accessible through the individual websites of code administrators. The proposal suggests there could be a single web portal to provide easy centralised access. Furthermore, the portal could provide digital assistance to users to navigate the code more easily e.g. finding all relevant sections for a specific topic.

### **Benefits**

30. The rationalisation and simplification of the existing codes could significantly reduce the regulatory compliance costs of the current regime, which can undermine incentives to promote change by placing a material burden on parties, in particular smaller organisations. Tackling the complexity of the current regime could help promote effective competition and lower barriers to entry by enabling smaller parties, including potential disruptors and innovators, to more ably understand and participate in the code modification process.
31. At this stage we cannot quantify the benefits from reducing the length of the code as we do not know by how much the length can be reduced, or how much staff time could be freed up as a result. The reduction could be substantial, for example National Grid Electricity System Operator

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<sup>10</sup> Covering both electricity and gas

(NG ESO) recently completed an illustrative case study to understand the impact of harmonisation, rationalisation and simplification of content in three related products detailed in section 6 of the Connection and Use of System Code (CUSC)<sup>11</sup>. This simplification exercise achieved a 76% reduction in the word count of the sections covered.

32. If codes were accessed via a single web portal rather than five separate websites it could greatly improve participant access, especially if there is additional functionality to make it easier for users to find the information required. These changes would reduce the administrative costs of participants of accessing codes and speed up the pace of code changes by managing edits electronically.

### Costs

33. The consolidation of the existing eleven codes to any smaller number, and the reduction in the length of the code would incur transitional costs only. These costs comprise of staffing costs for a team of legal professionals and industry experts working to rationalise and simplify the codes. There may also be a cost from specialised IT required for the process.
34. For codes consolidation we do not expect significant differences in costs between Option 1 and Option 2. However, we do expect different costs according to the approach taken for consolidation (for example, the workload stemming from simplifying all existing eleven codes into one code may be higher than simplifying into three codes).
35. Establishing and running a single web portal for codes incurs transitional set up costs and recurring operational costs. Set up costs comprise the expenditure for providing IT systems as well the cost of digitising the simplified codes. Operational costs include staffing costs for IT maintenance, hardware updates, translating code modifications into the online portal etc. It is unclear whether these operational costs will be higher or lower than the current costs of code administrators managing access to codes, it will depend on the costs of the additional functionality of the new portal versus the savings from running one platform rather than several. There will also be initial familiarisation costs for code parties using the new online portal and the consolidated codes.

### **Code managers**

36. A key feature of the proposals are the enhanced code management responsibilities. This function could either sit in a separate organisation to the strategic function (in Option 1) or integrated in one organisation (with the strategic function) – an Integrated Rule Making Body (in Option 2).
37. In addition to the current tasks of code administrators<sup>12</sup>, the code management function could also be responsible for:
- Identifying and developing changes (analysis, legal drafting etc.), including understanding the impacts
  - Making decisions on some changes, or making recommendations to the strategic body
  - Prioritising which changes are progressed

### Benefits

38. While the high-level aims of the code administrators are common across codes, there are currently many differences concerning how the bodies are structured and function in practice. For example, the roles, ownership, funding, accountability and contracts often differ from one code to another. Having a standardised approach across codes could significantly reduce the regulatory compliance costs of the current regime.

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<sup>11</sup> <https://www.nationalgrideso.com/sites/eso/files/documents/ESO%20Reforming%20Code%20Content.pdf>

<sup>12</sup> Each code currently has a code administrator, which acts as an administrative or secretariat body appointed by the industry to manage the processes and functions set out within the code. This includes administering the process for changing the codes and acting as a 'critical friend', and providing support and advice to code parties on the change processes, as required by the Code Administration Code of Practice (CACoP)

39. The enhanced responsibilities of the code manager(s) would help to facilitate change more effectively. Enabling the code manager(s) to propose changes to the code would remove the reliance on industry or on Ofgem initiating ad-hoc SCRs to deliver the changes necessary to deliver the energy transition. It would also introduce an explicit role for prioritisation, ensuring a focus on the changes most likely to deliver on the Government's policy or its vision for the energy system. This would speed up the code modification process, more efficiently bringing forward the benefits the code modifications entail.
40. While engagement with industry will remain key to both options, we are proposing to increase the independence of decision making and the new bodies will be incentivised to deliver in the interests of consumers. This should ensure decisions are made independent of commercial interests and provide code managers with the powers and flexibility to progress and implement code changes. Again, this should speed up the code modification process as a lack of industry consensus can currently lead to delays. It should also bring forward code modifications that benefit innovators rather than industry incumbents which should increase competition by lowering barriers to entry.
41. It is not possible to quantify these benefits as we do not know how much faster code modifications will be or the details of the code modifications that will be needed in the future. However, we can provide an indication of the potential scale of the benefits from other similar analysis on reducing the time taken for code modification. BEIS has conducted analysis to assess the impact of granting exceptional and time-limited powers to Ofgem to directly change industry codes to implement reforms to the settlement process in a timelier manner<sup>13</sup>. The analysis estimates that the duration of the code modification process could be reduced by between 7.5 to 19.5 months for the settlement reforms. This leads to expected savings between £0.4 and £1m for Ofgem, and between £0.7m and £1.9m for industry (discounted benefits over a five years appraisal period in 2015 prices)
42. These cost savings were calculated using estimated salary and travel costs for Ofgem and industry respectively and the expected number of days of meetings and working groups that are no longer required due to more efficient implementation of reforms. As these reform areas represented a fraction of code activities, these additional reforms promise similar levels of efficiency in resource savings; achieving faster code change also allows the inherent benefits from code changes to be realised earlier.
43. Comparing the benefits of the code management function under Options 1 and 2, Option 1 has the advantage of creating clearer accountability and division of responsibility between the strategic body and the code manager(s). However, Option 2 could lead to greater co-ordination and collaboration between the strategic and code management functions, and lead to lower transaction costs of dealing with multiple organisations.

## Costs

44. The shift of current code administration responsibilities as well as the proposed addition of code management tasks would incur both up-front transitional costs and ongoing operating costs.
45. There could also be a cost to industry from faster code changes in terms of reduced regime stability and implementation costs of more code changes. However, any code change proposal would need to consider the costs and benefits of the change, including implementation costs, to ensure a net benefit of the change. There might not necessarily be more changes under the new system compared to the current system, but they would be made in a more timely and efficient manner.

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<sup>13</sup> See Impact Assessment on the Smart Meters Bill - half-hourly electricity settlement powers: <https://publications.parliament.uk/pa/bills/lbill/2017-2019/0083/18083-halfhourly-IA.pdf>

46. The transitional costs arise from the disruption of moving current code administration responsibilities, either to new code manager(s) (Option 1) or to the IRMB (Option 2). These costs include the costs of designing the code manager function, recruitment of additional staff necessary to take on the new responsibilities, and building up expertise. There could also be some familiarisation costs as parties move from the current code administration system to the new code management system.
47. The operating costs would include salaries, travel, IT, etc. The current code administrators incur operating costs in the existing system, and it is uncertain whether the proposed reform would lead to higher or lower operating costs than currently. This will depend on how much extra resource is needed to take on the additional code management tasks versus the cost savings from having fewer organisations managing codes.
48. The transitional costs could be higher for Option 1 due to the complexity of tendering for code managers. The tendering process would need a sufficient level of competition to keep costs low. In the absence of effective competition, measures such as price controls or scrutiny of code managers' budgets could be implemented to control code managers' costs, but these measures would incur their own administrative costs. If the contract or licence is only valid for a short period of time and there is frequent re-tendering, there will be more costs from running the tendering process and from the disruption of new code managers taking over. However, it could lead to greater efficiency if organisations are subject to competitive pressures on a regular basis.
49. The operating costs could be higher for Option 1. The staff level required is likely to be similar under Options 1 and 2, but Option 2 may have lower overhead costs (for example a single IT system or HR department) if they can be split across all code management and strategic functions in the single IRMB. There may also be additional costs under Option 1 of running a performance monitoring regime for code managers to ensure value for money.
50. At this stage it is not possible to quantify the costs of the move to code management as we do not know how code managers will be established and how much extra resource will be required for the additional code management tasks.

#### Establishment of code managers (only applies to Option1)

##### *How many code managers should there be?*

51. This question only applies to Option 1. By design, Option 2 envisages a single body (although, if there are multiple codes, the IRMB may decide to have separate code management divisions). This question needs to be considered alongside the question of code consolidation. If we decide that there should be a single code, then we consider there must be a single code manager. However, if we decide to have two or three codes, then there is a question of whether it would be preferable to have a single code manager across all codes, or to provide for having a different code manager per code.
52. If there are multiple codes, the benefit of having one code manager is that it would create a single source of information on all industry codes. This would avoid confusion over which code manager to go to for requests for guidance, avoid multiple requests to separate organisations and provide a consistent standard of delivery across codes. A single code manager may also have lower costs, as overheads (e.g. IT costs) would be split over the whole code management function, whereas multiple code managers would incur separate overhead costs.
53. However, one code manager could lead to lower competitive pressures at re-tendering stages as the incumbent would have a high level of expertise and experience that other organisations would struggle to compete with. This would lead to lower incentives for the code manager to drive down costs and may require additional scrutiny from the strategic body or Ofgem.

#### **Overall impact**

54. The four elements set out in this proposal complement each other in improving code governance. A strategic direction will set out the expectations for code development in line with BEIS policy

and consumers' interests. The code management function will be able to initiate and prioritise change that is needed to deliver the strategic direction and will ensure changes that are in consumers' interests are implemented in a timely way, even where consumers' and industry's interests may not be aligned.

55. More efficient and effective code modification allows the benefits of individual code changes to be achieved more fully and potentially realised earlier. These benefits are magnified where code change is necessary to facilitate a wider policy shift. This change should also contribute to ensuring that the code regime can keep pace with wider technical and policy developments.
56. There will be significant transitional costs from these changes, setting up the strategic function, moving from code administrators to a code management function, consolidating the codes and the familiarisation costs for market players of understanding new system. There will also be ongoing costs from the new strategic function and potentially from the additional code management responsibilities.
57. While we have not been able to quantify these costs and benefits, it seems likely that the administrative costs of changing the governance system are small in comparison to the indirect benefits from the code modifications these changes will enable.
58. It is not clear which option will have greater benefits as they are very difficult to quantify. While Option 1 has the advantage of creating clearer accountability and division of responsibility between the various functions, Option 2 could lead to greater co-ordination and collaboration. Option 1 could be slightly more costly than Option 2 as combining the strategic function and code management functions into one body enables the sharing of overhead costs.

## Level of analysis used in the IA

60. The analysis contained in this Impact Assessment is considered proportionate for a consultation impact assessment. The analysis sets out estimates of the potential impacts associated with the implementation of Option 1 and Option 2. Where possible we have quoted separate analysis or referred to existing measures and policies to provide an indication of the potential costs and benefits of the proposed measures.
61. The key analytical risks and uncertainties have been identified.

## Risks and assumptions

62. The proposal we assessed here is at the stage of consultation and only specified at a high level. Therefore, the impacts of the proposal are based on qualitative evidence only. However, we believe that we have identified and described all costs and benefits in a level of detail proportional to the stage of the proposal.
63. The costs and benefits of these options are highly dependent on the final specification of the proposal. Due to the early stage of the proposal the scale of costs and benefits remains uncertain.

## Direct costs and benefits to business calculations

64. BEIS considers these measures to be pro-competition and therefore to fall out of scope of business impacts. According to the Better Regulation manual<sup>14</sup>, a regulatory measure needs to satisfy all of four conditions in order to be considered to promote competition. In the following section we list the four conditions and provide a comment for each of them to explain how the proposed measures meet them.

- a) *The measure is expected to increase, either directly or indirectly, the number or range of sustainable suppliers; to strengthen the ability of suppliers to compete; or to increase suppliers' incentives to compete vigorously.*

**Comment:** The measures are expected to strengthen the ability of parties to compete. As the CMA noted, the current framework creates significant compliance costs to industry due to the complexity of codes arrangements. The CMA considers that these costs fall disproportionately on smaller parties and hinder their ability to compete and generate innovation in the industry. The measures proposed would strengthen the ability of small parties to engage in the code modification process and compete more effectively in the industry.

- b) *The net impact of the measure is expected to be an increase in [effective] competition (i.e. if a policy fulfils one of the criteria at (a) but results in a weakened position against another) and the overall result is to improve competition.*

**Comment:** The policy is likely to have positive impacts on all criteria listed under a), although the criteria described above is considered to be the most relevant and most likely to materialise in this context. With regards to other criteria, by making the market more transparent and enabling the timely and effective introduction of policy changes that meet BEIS and Ofgem's strategic objectives, the policy should increase incumbent firms' incentives to compete, particularly smaller players who would benefit more than larger players from increased pro-competitive changes to codes. More streamlined code governance arrangements could also have an impact on barriers to entry in the market, as operating in the industry might be perceived as less

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<sup>14</sup> <https://www.gov.uk/government/publications/better-regulation-framework>

complex by potential new entrants, possibly leading to an increase in the number of firms competing in the market.

c) *Promoting competition is a core purpose of the measure.*

**Comment:** The CMA has found that the existing code governance arrangements prevent the effective implementation of code modifications that would promote competition. The proposed package will allow us to alter the system enabling it to cope with new technologies, new business models and new ways of running the energy system that are emerging. These innovations are important for enabling our vision for smarter markets where consumers are more engaged and empowered which is in the interest of consumers and competition.

d) *It is reasonable to expect a net social benefit from the measure (i.e. benefits to outweigh costs), even where all the impacts may not be monetised*

**Comment:** As discussed in the previous section on overall impact, it seems likely that the administrative costs of changing the governance system are small in comparison to the indirect benefits from the code modifications these changes will enable. The proposed reform will enable the timely implementation of policy changes in line with BEIS's strategic objectives, providing benefits to society such as the move to a low carbon system that is both secure and affordable. The analysis provides a solid basis for this consultation IA; further analysis will be completed following information received in response to the consultation questions.

### Small and Micro Business Assessment (SaMBA)

65. BEIS's Business Population Estimates<sup>15</sup> provide the combined number of employers in the 'Electric power generation, transmission and distribution' and the 'Manufacture of gas; distribution of gaseous fuels through mains' sectors. In 2018 there were 1,770 micro businesses in the electricity sector and 45 in the gas sector. There were 410 small businesses in the electricity sector and 15 in the gas sector. There has been a particularly large increase in the number of micro and small businesses in the electricity sector since 2013, a rise of 350% and 390% respectively, compared to rises of 200% and 167% for medium and large businesses. These figures show that micro and small businesses play an important and increasing role in the electricity and gas sectors.

Table 1 - Number of employers in the private sector, Electric power generation, transmission and distribution industry group, UK, start 2018

<b>Electric power generation, transmission and distribution</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
All employers	645	1,045	1,430	1,825	1,945	2,245
Micro (1 - 9 employees)	505	825	1,130	1,440	1,520	1,770
Small (10 - 49 employees)	105	170	255	325	365	410
Medium (50 - 249 employees)	20	30	25	35	35	40
Large (250 or more employees)	15	20	20	25	25	25

Table 2 - Number of employers in the private sector, Manufacture of gas; distribution of gaseous fuels through mains, UK, start 2018

<b>Manufacture of gas; distribution of gaseous fuels through mains</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
All employers	60	65	65	65	75	80
Micro (1 - 9 employees)	35	35	40	35	45	45
Small (10 - 49 employees)	15	15	15	15	20	15

<sup>15</sup> <https://www.gov.uk/government/statistics/business-population-estimates-2018>

Medium (50 - 249 employees)	5	10	5	10	5	10
Large (250 or more employees)	5	5	5	5	5	10

66. All parties in these sectors face the cost of monitoring changes in government policy, regulation and industry code developments. While this regulatory environment is a cost of doing business applicable to all parties, the fixed costs of compliance are more of a burden for new entrants and smaller parties with smaller customer bases over which to spread these costs. Further costs are involved if a supplier wishes to try to influence any such changes. The CMA's evidence found that smaller parties did not have the resources to be involved in every modification or even to suggest modifications themselves<sup>16</sup>
67. Beyond small businesses already participating in the sector, there could also be small innovative companies who are finding it difficult to enter the sector due to the complexity of the codes or the codes' inability to keep up with innovation. Over the last two and a half years, Ofgem's innovation hub has engaged with 274 innovators seeking to understand the regulatory implications of their propositions. Of these, Ofgem gave substantive support to 81 businesses looking to innovate in the electricity retail and flexibility markets. Of the 81, 36 (44%) sought feedback that covered code requirements. This demonstrates that codes are an important issue for innovators. These figures are the lower bound of the number of affected organisations, there may be other innovators facing issues with code requirements who have not been in contact with Ofgem and, of those who were in contact, code requirements may have become material considerations in later stages of their development.
68. The proposed changes to the codes system may lead to short term administrative burden and familiarisation costs for micro and small businesses already in the electricity and gas sectors, but there are substantial benefits. Rationalising and simplifying the codes should lead to lower ongoing administrative burden for businesses in terms of understanding and ensuring compliance with the codes. The introduction of a strategic body and the move away from industry control should ensure the timely delivery of modifications to industry codes that generate wider benefits to the market, even if they do not directly benefit large, incumbent industry participants individually.
69. Overall, we would expect the initial costs to be outweighed by ongoing benefits from lower costs of interacting with the codes, and the code changes that the proposals enable which should level the playing field for smaller businesses.

## Wider impacts

70. We have considered wider impacts on competition and consumer confidence in the market which we consider to be the most relevant ones for this analysis.
71. The wider impacts we have considered are:
- **Competition:** The current code governance approach makes sense where only small-scale changes are needed to keep the rules and systems fit for purpose, where the composition of the industry is homogenous, and interests are largely aligned. However, the significant industry change that we anticipate in the years ahead calls this model into question. New technologies, new business models and new ways of running the energy system are emerging. These innovations may help us move to a low carbon system that is both secure and affordable. They will also be important for enabling our vision for smarter markets where consumers are more engaged and empowered. But the existing industry code governance framework may be preventing these innovative ideas from coming to fruition, especially where they require significant changes to existing arrangements, and where they are not aligned with certain industry interests. Both Options 1 and 2 should enhance the functioning of code governance arrangements so that code changes that are considered beneficial to the market are not delayed by incumbent firms that would not directly benefit from such changes. This should have a beneficial effect on competition and lower barriers to entry in the market.

<sup>16</sup> See CMA working paper on Codes: <https://assets.publishing.service.gov.uk/media/54f730f140f0b61407000003/Codes.pdf>

- **Consumer Confidence:** As the proposals are aimed at improving competition and ensuring that code governance arrangements take more account of consumers' interests, consumer confidence should increase as a result of the proposals.

## Summary

72. BEIS's preference is to implement either Option 1 or Option 2 to improve the codes governance system, however neither option is preferred over the other at this stage. Further details of the policy will be developed following this consultation.

## Annex 1 – List of CMA published documents on Codes Governance

Document	Details	Publication Date	Link
<i>Working Paper on Codes</i>		March 2015	<a href="https://assets.digital.cabinet-office.gov.uk/media/54f730f140f0b61407000003/Codes.pdf">https://assets.digital.cabinet-office.gov.uk/media/54f730f140f0b61407000003/Codes.pdf</a>
<i>Provisional Findings Report</i>	See page 455-472 for analysis and case studies on Code Governance	July 2015	<a href="https://assets.digital.cabinet-office.gov.uk/media/559fc933ed915d1592000050/EMI_provisional_findings_report.pdf">https://assets.digital.cabinet-office.gov.uk/media/559fc933ed915d1592000050/EMI_provisional_findings_report.pdf</a>
<i>Appendix 11.2: Codes and Regulatory Governance</i>		July 2015	<a href="https://assets.digital.cabinet-office.gov.uk/media/559fb725e5274a155c000054/Appendix_11.2_Codes_and_regulatory_governance.pdf">https://assets.digital.cabinet-office.gov.uk/media/559fb725e5274a155c000054/Appendix_11.2_Codes_and_regulatory_governance.pdf</a>
<i>Provisional Decision on Remedies Report</i>	See page 708-737 for analysis on Code Governance; See page 748-750 for final recommendations to DECC (BEIS) and Ofgem.	March 2016	<a href="https://assets.digital.cabinet-office.gov.uk/media/5706757340f0b6038800003b/Provisional-decision-on-remedies-EMI.pdf">https://assets.digital.cabinet-office.gov.uk/media/5706757340f0b6038800003b/Provisional-decision-on-remedies-EMI.pdf</a>
<i>Appendix 10.4 : Reform of Code Governance</i>		March 2016	<a href="https://assets.digital.cabinet-office.gov.uk/media/56ebe114e5274a14d700000a/Appendix_10.4_-_Reform_of_code_governance.pdf">https://assets.digital.cabinet-office.gov.uk/media/56ebe114e5274a14d700000a/Appendix_10.4_-_Reform_of_code_governance.pdf</a>
<i>Final Report</i>	See pages 1257-1288 for analysis on code Governance; See pages 1361-1393 for remedy on code governance.	June 2016	<a href="https://assets.publishing.service.gov.uk/media/576d3f15e5274a0da9000092/energy_market_final_report.pdf">https://assets.publishing.service.gov.uk/media/576d3f15e5274a0da9000092/energy_market_final_report.pdf</a>
<i>Appendix 18.2</i>		June 2016	<a href="https://assets.publishing.service.gov.uk/media/576bcd32ed915d622c000081/appendix-18-2-codes-aec-fr.pdf">https://assets.publishing.service.gov.uk/media/576bcd32ed915d622c000081/appendix-18-2-codes-aec-fr.pdf</a>

## Annex 2 – Summary of selected CMA case studies

Case study summary:	CMA analysis findings:
P272 – concerning the introduction of half-hourly metering and settlement for SMEs (profile classes 5 to 8) in electricity;	When code modifications might have substantial financial costs and these are spread unequally among industry participants, the industry-led governance route is not effective at implementing change in a timely manner.  The CMA showed concern that even if the proposed changes would generate public benefit; the parties involved in the process do not have incentives to prioritise such change.
Project Nexus – metering and settlement in gas, including modifications to allow the full benefits of smart meters to be realised;	
17-day switching – a reduction in the time taken to switch customers;	The CMA found that Ofgem's decision to use its powers to enforce three-weeks switching through licence conditions prompted industry to act quickly and the necessary code modification proposal was initiated, developed and implemented by industry in a period of about a year.
Gas Significant Code Review (Gas SCR)	The CMA found that regardless of the differences in powers (Ofgem implemented a SCR) the modification process was long in both cases.
Electricity Balancing Significant Code Review	

### Annex 3 - Existing routes for code modifications

- Table 1 shows the three existing routes for code modifications. In all cases, code modifications have to go through four different stages: initiation (by means of a modification proposal), development (including consultation), decision on approval, and implementation. The bodies responsible for each step vary according to the route followed.

**Table 1: Alternative processes for modifying codes**

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

Source: CMA (Final Report, page 1273)