Dear Sir/Madam,

We are pleased to submit the IET’s response to the Open Consultation on Energy Code Reform: Governance Framework.

The Institution of Engineering and Technology (IET) is Europe's largest professional engineering and technology organisation with 154,000 members drawn from industry, academia and the public sector. The members represent a wide range of expertise, from technical experts to business leaders, encompassing a wealth of professional experience and knowledge. Our primary aims are:

- to provide a global knowledge network, promoting the exchange of ideas between business, academia, governments and professional bodies, and enhancing the positive role of science, engineering and technology
- to address challenges that face society in the future.

We would be happy to discuss our response in more detail and provide examples and evidence from our earlier reports and extensive networks of engineering employers and academic partners.

**Recommendations:**

Our principal recommendations are summarised in the box below.

1. Governance needs to extend beyond code governance and should embrace relevant industry standards to ensure future technological and market developments are captured.

2. The proposal to create a Future System Operator (FSO) provides an opportunity to reconsider the overall model and which party would be best suited to deliver the Strategic Function. We believe that this model should be an independent executive public body that integrates of relevant functions of the FSO and Ofgem with the FSO performing the Strategic Function and Ofgem having overall responsibility for coordination of the activities of Code Managers.

3. Code Managers should be responsible for code management, changes and development and should take decisions on whether to approve a change to enter the change process; and on whether to approve non-material code changes.

4. There is now an urgent need to adopt a whole energy system perspective taking into full consideration interactions between the energy sector and other sectors such as transport and agriculture.
Design & Delivery of the Energy Code Reform

The IET, working with the Energy Systems Catapult, has taken a leading role in exploring energy system governance over the last ten years as part of the Future Power System Architecture (FPSA) programme. We are delighted that Government and Ofgem are now raising the priority on this vital issue, although we continue to be concerned about the rate of progress. We are pleased to note that Government and Ofgem appear to have drawn on the FPSA reports to develop the reform proposals, but we would nevertheless recommend further reference to them to help bring forward final reform proposals, in particular the Phase 3 report: ‘Fast track to Britain’s future power system’1. In particular, we would commend the report’s proposed code change process as worthy of incorporating in the new code governance arrangements.

1. To what extent do you agree with our proposals on the licensing of a code manager for in-scope engineering standards, and why?

We agree that governance needs to extend beyond code governance and should embrace relevant industry standards, and indeed new standards that might emerge as a consequence of innovation and both technological and market development. For example, given that ‘beyond the meter’ or ‘grid-edge’ technologies will play an increasingly important role in the future operation of the electricity system, it would seem sensible for the standards relating to such technologies to be subject to a degree of industry governance. Whilst the consultation proposes that standards which sit under the remit of non-energy specific bodies, such as the British Standards Institute (BSI) or the Institution of Gas Engineers and Managers (IGEM), should not be within the scope of the proposed reforms, we feel that this position should be kept under review.

2. What are your initial views on how central system delivery bodies should be regulated (including their relationship or integration with code managers and the extent to which licensing may be appropriate), bearing in mind this may be the subject of future consultation?

We have no particular views other than those outlined in our responses below regarding the roles we would propose for the FSO.

3. To what extent do you agree with the detailed roles and responsibilities of the strategic function, as set out above, and why?

We agree that the main roles of the Strategic Function should be to identify and analyse how the Government’s strategic vision for the energy sector and related policy priorities (including net zero by 2050), current and future trends in the energy market, and the emergence of innovative technologies create the need for changes across the code landscape. Such changes must be applied in a holistic way across codes. However, since the publication of the earlier consultation on Reforming the Energy Industry Codes in 2019, the subsequent proposal to create an FSO provides an opportunity to reconsider the overall model and which party would be best suited to deliver the Strategic Function.

In our view the Future System Operator (FSO), as an appropriately resourced and empowered independent executive public body (IRMB), is the logical party to fulfil this function. The IRMB is presented as an option only in model 2 (the Strategic Function and Code Manager functions being combined within the FSO – obviating the need for separate Code Managers). However, we would see value in an IRMB also being included in model 1. In this arrangement we would advocate the IRMB

being an ‘integration’ of relevant functions of the FSO and Ofgem – i.e. the FSO performing the Strategic Function and Ofgem having overall responsibility for coordination of the activities of Code Managers. This would include approving code changes and implementing any associated changes to licence conditions.

4. To what extent do you agree with the proposed roles and responsibilities of the code manager function as set out above, and why?

We agree with the model 1 structure insofar as it applies to code management – i.e. that assigning responsibility to Code Managers for code management, changes and development. We agree that Code Managers should be appropriately resourced to be able to deliver both high and lower priority code changes. Also, decisions on prioritisation should be transparent and informed by stakeholder views, including industry. The strategic function (as performed by the FSO) would provide oversight of the prioritisation process, including giving appropriate steer through the Strategic Direction.

Ofgem would however have overall responsibility for ensuring delivery by Code Managers of code simplification, and consolidation of the existing code structure. Ofgem would also be responsible for systematic alignment of code development with the Government’s vision for the energy sector and related policy priorities, as guided by the FSO in providing the Strategic Direction and Vision.

5. To what extent do you agree with the proposed roles and responsibilities of stakeholders as set out above, including the role of the stakeholder advisory forums, and why?

We agree broadly with the proposals in respect of stakeholders. However, provided that fair industry access is available, and stakeholders have the right to be involved in industry governance, we believe that actions should be taken to ensure they do not have to partake in the governance process for their views to be represented. To that end, we believe the FSO in performing the Strategic Function should be independent and fully resourced, and regularly engage with stakeholders. To that end, the independent Strategic Function (in our view the FSO) in creating the long-term strategic direction, should facilitate workshops which bring together industry, Government and internal expertise (including the Code Managers) and stakeholders and innovators with specific expertise.

7. In relation to option 2, where the FSO would take on the role of the IRMB, to what extent do you agree with our proposals on how relevant decisions by the code manager function would be appealable to Ofgem, with a potential prior review route via an internal body?

Whilst we would support a modified version of model 1 rather than model 2 (as outlined in our response to Q4) we would nevertheless propose an IRMB also being included in model 1. As explained in our response to Q3, we would see the IRMB being formed through an ‘integration’ of relevant functions of the FSO and Ofgem.

8. Do you have any views on the two proposed options for appealing decisions made by Ofgem on material code changes in option 1 (with Ofgem as the strategic body) and option 2 (with the FSO as the IRMB)?

We have no particular preference (other than that we believe the FSO should be the Strategic Body as explained in our response to Q3). However, we would agree with the expectation that Code Managers would draw on the expertise of wider industry (not only licensees) and ensure that their views are sufficiently represented, for example through the formation of stakeholder advisory forums. Given this provision we would expect that the need to implement the appeal process would be minimised as there should be greater transparency of Ofgem’s and code parties’ positions as part of the code review process.
9. Do you have any thoughts on other potential appeal routes?

The proposed appeal routes seem logical. We agree that the Code Managers should take decisions on the materiality of a code change; on whether to approve a change to enter the change process; and on whether to approve non-material code changes. We also agree that the Strategic Body should decide on material code changes; performance assurance; and strategically critical operational matters related to the codes. However, under our preferred model (reference our response to Q3) we would advocate that Ofgem (being one part of the IRMB under our proposals) would oversee the Code Managers and approve their decisions (or refer them where necessary) whilst the Strategic Body (being the FSO and the other party to the IRMB) would hold the Code Manager accountable for codes relating to performance assurance and strategically critical operational matters. The FSO would consider appeals relating to these codes. In practice, we would see the IRMB (i.e. Ofgem and the IRMB) jointly hearing appeals not least because deciding on ‘materiality’ might not always be straightforward).

10. To what extent do you agree with the proposed operating model and accountability structure for Ofgem as the strategic body, and why?

As stated in our response to Q3 above, we believe the proposal to establish an FSO provides new and better options for providing the Strategic Direction and Vision and for delivering the Strategic Function. Also as explained in our response to Q3, we would see merit in model 1 also establishing an IRMB comprising the FSO and Ofgem.

11. To what extent do you agree with the monitoring and evaluation approach for Ofgem’s performance as the strategic body, and why?

We agree broadly with the rationale and methodology for monitoring and evaluation, but in relation to the performance of the FSO rather than Ofgem.

12. To what extent do you agree with the ways we propose that the strategic body selects code managers, and why?

We have no strong preferences regarding the various approaches for selecting Code Managers outlined by the consultation. The imperative is that selected Code Managers are able to execute their duties unencumbered by vested business interests (explicit or implicit) and that they have the required knowledge and interpersonal skills to achieve consensus in efficiently implementing code changes.

13. To what extent do you agree with our proposed approach to code manager funding, and why?

We note the consultation proposes that the Secretary of State would initially designate Ofgem to be the Strategic Body but could, in future, designate another person to be the Strategic Body instead. Again, we would advocate the FSO being the Strategic Body from the outset. We would however accept that, due to the urgency of implementing code reform, in the event of any undue delay in establishing the FSO (which we also regard as urgent) then the Secretary of State might reasonably appoint Ofgem as the Strategic Body as an interim measure.

We agree that funding should be through charges to the energy industry through licence fees. We also agree that funding should not be ring-fenced as work on codes is already cross-cutting and can be expected to be more so in the future – indeed extending to cross-vector issues.
14. To what extent do you support our proposal that the strategic body should be accountable for code manager budgets, and why?

Under our proposed model (again please refer to our response to Q3) we would advocate that the Code Managers should be accountable for their own budgets (an accountability which in itself might encourage pragmatism and consensus in decision making). However, since their funding would be derived from licence fees (and hence ultimately customers) we believe Ofgem should have overall responsibility for approving budgets and holding Code Managers to account in the event of overspends.

15. To what extent do you support the proposed operating model and accountability structure for option 2, where the FSO takes on the role of the IRMB, and why?

Please refer to our response to Q3 and Q4 above.

16. Overall, which of the two options do you think would be best placed to reform code governance, and why?

Please refer to our response to Q3 and Q4 above.

17. To what extent do you agree with our estimated costs for the new code manager function set out in the impact assessment, and why?

Not answered.

18. To what extent do you agree that the case studies included in the impact assessment are indicative of the major barriers facing code changes under the current system, and why? Can you provide further examples of when current code governance has resulted in either optimal or sub-optimal outcomes?

The two case studies presented in the IA demonstrate clearly why code reform and better strategic oversight is urgently required. However, whilst we are not in a position to select specific examples of inefficiencies in the current code governance arrangements, we are mindful that the current process is generally too slow, bureaucratic, not sufficiently inclusive, and bereft of the necessary agility to keep pace with the increasing speed of transformation that the energy industry is facing, and will continue to face for the foreseeable future, in delivering the Government’s Energy White Paper, 10 Point Plan, and Net Zero by 2050 ambitions. We therefore have no reason to challenge the quantum or materiality of the IA, indeed the assessment might well represent an understatement of the benefits that will accrue in practice.

19. To what extent do you agree with the scale and type of benefits to industry estimated in the impact assessment? Are there further cost savings to industry that should be included?

We are unable to ratify the suggested quantum of the benefits cited by the IA in monetary terms, but we agree that significant benefits will come from reduced delays to code modifications. That said, we believe that potentially far greater benefits could materialise from wider stakeholder engagement, greater inclusivity in the code governance process, and as a result of energy system efficiencies arising from improved quality of decision making. However, in order to fully accrue these benefits, we believe it will be necessary to also implement the principles for code governance and change management set out in the Future Power System Architecture Phase 3 report - ‘Fast track to Britain’s future power system’ – referred to in our introductory remarks to this response.
20. Are there any other wider industry developments we should consider in relation to the implementation timeline? How do you think these could impact on code reform?

The Government’s Energy White Paper and Ten Point Plan, and UK’s ambition to achieve net zero by 2050, have major implications for the Energy Industry (as well as other sectors). There is now an urgent need to adopt a whole energy system perspective taking into full consideration interactions between the energy sector and other sectors such as transport and agriculture. The proposed FSO must have this whole system view and the capability to develop an integrated energy system strategy that reconciles and optimises technology and markets. Notwithstanding stretching targets set by the Ten Point Plan (for example 40GW of offshore wind capacity by 2030) achieving net zero by 2050 requires urgent action today. It follows that the overall approach to energy system evolution and hence industry governance must be based on systems engineering principles such that the interdependencies between, and consequences of, decision making in respect of the evolution of the whole energy system can be better informed and understood.

21. Are there any implementation issues, risks, or transition considerations we should take into account? How could these impact code reform?

Inevitably, any fundamental reform of code governance, and creating (or carving out) an FSO from current energy industry bodies, carries risk of discontinuity in performing potentially critical functions. This risk might be particularly acute in respect of transferring key staff from National Grid to perform the FSO role and functions. It follows that, notwithstanding the urgency of implementing change, it will be important to adopt sound risk management principles.

22. We invite respondents’ views on whether our proposals may have any potential impact on people who share a protected characteristic (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex or sexual orientation), in different ways from people who do not share them. Please provide any evidence that may be useful to assist with our analysis of policy impacts.

Effective code governance reform will beneficially accelerate the pace towards achieving Net Zero. The energy system will become more digitalised, and consumers able to engage with this type of system will realise the benefits of engagement, whilst other consumers who cannot, will not. This creates a risk that reform favours those who have the financial and other resources to engage in these changes, and disadvantages those who do not. We regard this as an important matter for the FSO to consider, but also Ofgem in its role as Industry Regulator. Insofar as they might impact customers directly or indirectly, new codes and code revisions must fully consider how customers, particularly fuel-poor and vulnerable customers, can be protected.

23. Do you have any other comments that might aid the consultation process as a whole?

Of critical importance is the recognition that the energy system needs to be considered holistically with full consideration of the various energy vectors and how they will increasingly interact in future. In respect of the electricity system, ‘whole system’ must embrace technologies and capabilities beyond the customer meter which, through technology and appropriate integrated market mechanisms, can make a key contribution to the efficient, coordinated and economic development of the system. New grid-edge capabilities have the capability to not only mitigate the impact of increasing electricity demand from electrification of heat and transport, but to make an important contribution to the system in the form of providing balancing and ancillary services. It will be essential that the design and delivery of the Energy Code Reform takes full account of these opportunities by removing institutional barriers to innovation.