ENA Stakeholder Consultation on Electricity Network Innovation Strategy

Energy UK Response

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6. Are the 6 key innovation themes complete and appropriately phrased?
   No
7. If No, please state which themes would you add/delete/change.

Energy UK believes that some of these themes, rather than being indicative of innovation, are existing areas of responsibility for DNOs as part of business as usual (BAU). Health and safety measures, customer and stakeholder focus, and network improvements and system operability should be practises that are upheld anyway, or picked up in the Incentive for Connections Engagement (ICE), and as such should be further defined or removed.

Theme three, the development of new technologies and commercial evolution of innovative business models should not be under the domain and responsibility of DNOs. Market players are those that can provide new technologies and flexibility services in the most competitive way and at the lowest cost to consumers. Therefore, Energy UK would like this theme removed from the list of challenge categories. While procuring flexibility services from new technologies competitively in an open market, DNOs should be providing co-ordination of, and evidence of, system needs to the Electricity System Operator and market participants. Building assets or developing related commercial business models is not part of their operating licences, and should continue to be excluded.

On theme four, the transfer of innovation projects into BAU should take into due consideration the requirement for such projects to guarantee competition of market participants. Innovation projects should not imply a situation whereby DNOs operate as providers of flexibility services.

Requirements should be enforced to ensure that all innovation projects support the creation of a national programme of network innovation by sharing information freely and collaborating across territories and across all levels of the electricity grid.

8. Pick 2 themes that are most important for your organisation.

9. Is this list of challenges complete and appropriately phrased?
10. If no: Which challenges should be added or phrased differently?

These challenges are addressed under BAU.

The challenge related to improving network resilience to power outages should include the acknowledgment of the importance of using various sources of flexibility as an alternative to network upgrades. Customer flexibility, for example, could provide a range of solutions at a lower cost to consumers compared to network upgrades. Such flexibility should therefore be valued appropriately, and should not be considered as an interim solution while waiting for network upgrades.

This will become ever more relevant in the transition from DNOs to DSOs, whereby it will be key to separate the part of the business owning the cables and the part procuring flexibility services from providers of flexibility and owners of DER.

Furthermore, the final bullet point of these challenges gives no clarity on who the value is being maximised for. Should this value be for the consumer, it will then be necessary to establish how this value is defined and transferred. However, regardless of who this value is created for, the maximisation of existing assets is already part of the requirements for a network operator to keep costs low for consumers.

11. Which challenges do you believe are not being adequately addressed?

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12. Timeline of addressing these challenges?

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13. Is this list of challenges complete and appropriately phrased?

No

14. If no: Which challenges should be added or phrased differently?

On point one: The rollout, operation, and management of Smart Meters is not the responsibility of DNOs, and the choice over who uses data collected is ultimately that of the consumer. Requiring data access by a network, a relatively unknown body to the consumer, could heavily impact the willingness of consumers in adopting smart meters, a vital element of the move to a smart flexible energy system. Whilst high-level, aggregated and anonymised data showing demand patterns in constrained areas could be used to ensure consumer energy needs are met, any other use of this data to ‘extract value’ for the DNO without a comprehensive security and data protection framework would represent a concerning disregard for the privacy of the consumer.

On points two and three: We would note that for a holistic move to decarbonisation across power, heat, and transport, electricity and gas networks must cooperate on innovation projects in the uptake of a range of Low Carbon solutions for heat and transport, rather than just electric. This is noted in point 9, but the change to ‘low carbon’ in points two and three will allow for greater collaboration.
On point five: This point seems to identify demand side response (DSR) as a challenge to the transition to a low carbon future, where in reality DSR offers another asset in the move towards decarbonisation. DSR is also outside of the remit of the DNO and should therefore be kept carefully separated to ensure a fair playing field for those actors playing into flexibility markets.

On point six: This point requires clarification as to who can aggregate and control assets providing flexibility, generation, and storage. DNO use of aggregation would be equivalent to ownership of a generation asset, which would distort the market and would not abide by the unbundling principle. DNOs should not participate as competitors for providing services that an open market can do in a more efficient and cost-effective way. DNOs should communicate the network constraints that need to be addressed, and the market should be encouraged to provide, own and operate the solution to address such a constraint as flagged by the DNO.

On point seven: This transition simply entails ‘new roles for DNOs’, but this is not a truthful representation of the process. The DSO will be a new entity, and as such this should read: ‘enabling the provision of new platforms and actors’.

15. Which challenges do you believe are not being adequately addressed?

On point number six: For an effective transition to a low carbon future, providers of flexibility should be enabled to provide services across GB. Therefore, procurement methods for flexibility services should be standardised across the UK in order for DNOs/DSOs to act as enablers of flexibility.

On point number 8: This challenge is not currently being addressed given the low level of visibility on Low Voltage networks. Heat maps could be a valid solution as the rising number of distribution-connected small-scale energy assets make visibility an important element of future smart systems and flexibility.

16. Timeline of addressing these challenges?

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17. Is this list of challenges complete and appropriately phrased?

No

18. If no: Which challenges should be added or phrased differently?

On point one: It is vital that personal data is protected, and that customer rights to refuse to share information are protected. The ongoing debate over what level of granularity of data will be available to DNOs from installed smart meters will help to decide what the reasonable use cases are for household data to be shared. Given the lack of visibility and lack of DNO contracts with consumers, any proposed use of data by DNOs should be approached carefully to ensure that consumers are not dissuaded from adopting a smart meter or a flexible energy asset.

There is also a question of who owns the value extracted from this data. If this is consumer data, then the value should be directed appropriately to ensure that the customer is reimbursed for the use of
their data. Processing of customer data for the purpose of extracting value should not be done in any circumstance until cyber security protections and reasonable use restrictions are in place.

On point 4: The use of new technologies by a DNO should be dependent on whether this activity falls outside of the regulated business role of the DNO. If the DSO is to be an enabler of markets, it is important that they are not also an active market participant. The use of new technologies should clearly entail a competitive procurement in an open market.

19. Which challenges do you believe are not being adequately addressed?

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20. Timeline of addressing these challenges?

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21. Is this list of challenges complete and appropriately phrased?

No

22. If no: Which challenges should be added or phrased differently?

On point one: The integration of previous and future innovation projects into BAU is dependent on whether these projects include the installation of assets which are outside of the DNOs remit to own and operate. For example, the installation of storage or generation assets or the aggregation of existing assets in an innovation project should not result in a wider breach of licence agreements in the continued operation or ownership of these assets by a DNO. The use of innovation funding to purchase assets also means that the DNO should not be able to sell on these assets unless this recovered revenue is passed back to the network innovation fund.

On point two: Value derived from innovation projects should be directed back into reducing network costs on consumer bills and ensuring network reliability, which we believe will be best addressed by the creation of effective markets for flexibility.

23. Which challenges do you believe are not being adequately addressed?

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24. Timeline of addressing these challenges?

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25. Is this list of challenges complete and appropriately phrased?

No

26. If no: Which challenges should be added or phrased differently?

On all points: Whilst we agree that these are challenges which must be addressed, a customer focus should not be considered innovative in and of itself. Continuously improving the customer experience and improving affordability for the customer are areas of focus which should be addressed in the day-
to-day operation of the network. In the view of Energy UK members, solutions to these challenges are already incentivised by the ICE process.

27. Which challenges do you believe are not being adequately addressed?

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28. Timeline of addressing these challenges?

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29. Is this list of challenges complete and appropriately phrased?

No 

30. If no: Which challenges should be added or phrased differently?

On all points: As with the previous section, the points here are related to BAU, and are not innovative in isolation. The health and safety of the public, staff, and contractors should be addressed at all times, and should never be reliant on access to innovation funding. Requiring additional funding for these challenges may in fact be reflective of poor management of a network and the assets therein. On point one: The phrase ‘continuously improve’ is not conducive to innovation funding, but rather reflects incremental improvements which should be achieved as part of the BAU management of a network. Funding for continuous improvements could also be interpreted to mean open-ended funding for improvements which are the inherent responsibility of the DNO.

31. Which challenges do you believe are not being adequately addressed?

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32. Timeline of addressing these challenges?

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33. Is this list of challenges complete and appropriately phrased?

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34. If no: Which challenges should be added or phrased differently?

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Boundaries of the Network funding available to Network Companies

35. Should the boundaries of the Energy Networks Innovation Strategy be expanded?

No 

36. What innovation types should be included that are currently out of scope?

None

Additional Questions
37. Is there anything missing from this aspect of the ENIS which you feel should also be considered?

The need for innovation to not extend beyond the remit of a DNO or DSO, in that it should not enable the purchase of assets outside of those covered in the licence agreements for DNOs. Please refer to our response to question 22.

38. Do you have any comments on this consultation or its usefulness?

We would like to extend gratitude to the ENA for consulting and in particular for allowing Energy UK an extension period to allow us time to compile member views. The format of this consultation was problematic and caused difficulty for both Energy UK and members due to a lack of visibility of the questions before entering the questionnaire. This and the short time frame for responses made the process of responding difficult.

Energy UK believes that the terms of innovation funding, and the scope of what is included in projects receiving innovation funding, should be determined by Ofgem. As such, while it is a useful exercise for the ENA to see identify industry thoughts through this consultation process, it is important that Ofgem consults on this topic as well. The final decision on applicable innovation projects should be retained by Ofgem after listening to a wide range of industry views.

As can be seen in this response, we have been unable to determine or define the timelines associated with the challenges noted in the report. In many cases this is because we do not believe the challenges to be appropriate (i.e. they should either be BAU or are outside of the DNO / DSO prevue), but also there are concerns as to the timescales offered in terms of linkages to ED1 timings.

Energy UK is aware of a number of responses to the consultation sent by our members, and asks that colleagues at the ENA refer to those responses for further detail, as Energy UK members’ opinions may vary on the specifics of the ENIS. The points brought out here reflect the overarching views of our membership.

We would be happy to discuss any of the points made in this response in further detail with the ENA, individual DNOs, or any other interested party if this is considered to be beneficial.

39. Would you like to opt out of future phases of the consultation?

I would like to stay involved.