

The Future of Distributed Flexibility

ENWL call for input response

Annex 1: Response to questions

May 2023



Contents

Introduction	2
1 The imperative, potential, and challenges of flexibility	2
2 The case for change	2
3 What that future could look like	3
4 Delivery Considerations	4

Introduction

In this annex we set out our response to the questions set out in the call for input document.

1. The imperative, potential, and challenges of flexibility

Q1. What do you think distributed flexibility could contribute to the energy system?

We believe that distributed flexibility is a fundamental prerequisite for delivering Net Zero at lowest cost to customers. But widely available significant volumes of distributed flexibility will only exist in the future if the markets arrangements and the digital infrastructure facilitating market operation are open, easy to access and simple to participate for everyone. For us, with our local regional authorities targeting Net Zero by the late 2030s, the need to open up and grow flexibility markets is a pressing priority and so we welcome this timely intervention by Ofgem to create the vision and the framework for its delivery as it is recognising that the pace of change is key to delivering next zero by around 2040.

Q2. Will a focus on CER flexibility also help enable other forms of flexibility, especially distributed flexibility?

We support restructuring the flexibility markets to harness the, as yet, untapped potential of consumer energy resources(CER). There is a significant risk that a huge number of consumer owned flexible energy resources could remain unharnessed unless arrangements are designed for including these energy resources; and so we agree that focussing on these customers is right as we need domestic customers to participate in distributed flexibility markets to achieve Net Zero at lowest cost. Focus has previously been on large discrete distributed energy resources (DER) with processes and policies designed for their participation and it is likely that an unintended consequence has been the exclusion of domestic customers. This proposed change of emphasis is necessary as their participation in distributed flexibility markets is vital. We agree with the Ofgem approach that building policies and processes which remove barriers for CER participation should in turn provide reform for DER participation. The key to unlocking significant volumes of distributed flexibility is the enabling easy and straightforward access to markets and simple stacking of different services, thereby maximising the benefits for the seller whilst ensuring maximum use of the available assets across the energy system.

2. The case for change

Q3. Is there a ‘case for change’ and a need for a common vision for distributed flexibility?

The July 2021 BEIS and Ofgem Smart System and Flexibility Plan has provided a clear direction and guided the current industry actors to collaborate, through the ENA’s Open Networks Project to develop common and standard products, contracts and processes which has delivered a step change in the electricity industry. The volume of flexibility participants with their associated MVA involved in tenders and purchased by DNOs has grown significantly over the life of the Open Networks Project, showing the benefit that the collaboration has delivered. But accelerating the delivery pace is key and we welcome Ofgem’s common vision for distributed flexibility that specifically engages with consumer energy resources, alongside distributed energy resources. The market clearly needs to evolve, and we believe this timely intervention by Ofgem is right as it sets the direction for the electricity industry on the path to deliver Net Zero by 2050.

Q4. What is your vision for how to accelerate the delivery of accessible, coordinated and trusted markets for distributed flexibility?

As a single actor we have always been aware that we could have limited influence on wholesale market change, but within the confines of our RIIO-ED2 DSO Transition Plan we set out what we thought we could do, and what was the right thing to do, for the development of the distributed flexibility market. The vision of a common distributed flexibility market could only come from those with the mandate and the ability to drive delivery; only Ofgem with DESNZ are able to do this on a national level. But a common vision alone cannot be delivered without clear transparency, engagement and participation.

Our RIIO-ED2 stakeholder engagement told us a common, consistent, simple and transparent gateway to all markets is key, facilitated by common data standards for participation and sharing data which is an enabler for market coordination. The most important aspect is the governance framework; a market facilitator must be neutral with simple, transparent rules that engenders trust and encourages participation. A failure of trust destroys market confidence and reduces participation.

Q5. Will certainty of an end vision help accelerate enabling work and make it cohesive?

Yes, the end vision helps set the direction of travel, but to accelerate and enable the benefit potential, clear details of organisational accountabilities and responsibilities and how these will be funded have to be set.

We would welcome such end vision being set out in a strategic policy statement, issued by Ofgem, as this clarifies the intent and binds the participants to its delivery. This clarity provides transparency for the role to be played by the Future System Operator, amongst others.

Creating a policy statement means that the Smart System and Flexibility Plan (or its successor) can fulfil the role of providing the detail for the next level down to the vision in the policy statement covering key enablers, timescales, and the framework and decisions to enable delivery at pace.

Q6. When should a common digital energy infrastructure be in place? And therefore, when should development begin?

A common digital energy infrastructure needs to be established as soon as practicable and certainly before the end of ED2. The country has set its binding Net Zero targets and each region has acted with urgency by declaring their climate emergencies and creating plans to deliver their own Net Zero aims and so there should be no delays in its development.

We understand that the FSO is due to be established as an independent entity with its own statutory powers in 2024, and so we expect the ESO will be heavily engaged with the work on FSO mobilisation. The ESO's participation in the design process is crucial due to their skills and experience so a way needs to be found that enables the ESO's involvement in the process without compromising the FSO mobilisation work or delaying the delivery of this vision.

In the interim, we think plans should be started immediately under the current ESO structure by an expansion of their roles and responsibilities. Ofgem has created a flexible regulatory structure for the ESO for RIIO-2 that enables swift action.

3. What that future could look like

Q7. What should a common energy digital infrastructure look like, and why? Please consider the archetypes or develop your own proposition.

Q8. What is your view on the desirability and feasibility of the archetypes or your own alternative proposition?

The answers to questions 7 & 8 are combined below. We welcome the development of the three archetypes to bring to life the spectrum of solution options and aid discussion and consideration of a potential solution.

It appears that the ‘Thin’ archetype doesn’t solve some of the market failures detailed in the CFI and therefore question whether it would deliver sufficient benefits. Although we recognise it could be a quick win on an implementation trajectory.

Electricity North West has been advocating for a model broadly like the ‘Medium’ archetype (categorised as the System Flexibility Exchange (SFE)), with standardised access arrangements, information provision protocols and a market co-ordination functionality. The proposed exchange delivers on the desired outcomes, including a governance framework for ensuring transparency and trust, whilst allowing competition and innovation in platform services.

The ‘Thick’ archetype seems a step too far, for now, but we should not foreclose the pathway to this solution as there may come a time when it is appropriate to rationalise to one platform arrangement. However, with pace as a key driver, this solution is inappropriate currently.

The System Flexibility Exchange is the natural evolution from the current industry position, as it brings together into one ecosystem multiple platform providers. But it must facilitate competition and innovation in platform services provision, easily allowing providers to fall away and new providers to join.

The design of the Exchange should be collaborative with the SFE becoming a public interest asset; but design the process should start with the assessment of existing markets and infrastructure, as there are current pockets of excellence operating.

4. Delivery Considerations

Q9. Should a common digital energy infrastructure be new-build, or should it build-out from existing infrastructure?

The common digital energy infrastructure should be built out from existing systems as there are already pockets of excellence in operation. This approach means that it will be cognisant of what is already there and minimises stranding risk.

As stated previously the design process for the SFE should be collaborative, with the FSO leading the process, as the setting of data standards and protocols must be done in conjunction with existing platform services providers and flexibility providers. But getting the new digital backbone right for CER is crucial to the success of the SFE. The data standards, connectivity and protocols for the SFE need to be developed inclusive of the end customer providing the flexibility (ie down to each CER); but not limiting the ability for CER to be grouped to provide aggregated services or CER to be locked into exclusive arrangements. Designing in customer choice from the start is vital and much can be learnt from the approach devised in the ADE’s Flex Assure Code of Conduct, and the proposed Code of Conduct from the NIA funded HOMEflex project.

Q10. What are the important areas for consideration when designing institutional delivery models for a common digital energy infrastructure?

We would generally favour competition with commercial private entities as the most beneficial model best placed to deliver services for consumer benefit. But in this particular case, given the objective is to develop one single source infrastructure and operating body, we agree with Ofgem that a purely commercial approach may not deliver on this objective, and therefore we consider the strong likelihood that the operation of a flexibility exchange is a natural monopoly, without suitable comparators.

This is not to say that all elements should be delivered by a monopoly provider, indeed the development and build is likely best suited to a commercial entity with expertise in the field. Any such appointment should be by open competitive tender in line with usual utilities best practice.

We have long advocated for a separate, independent platform or flexibility exchange for all market participants to use, and we propose that ownership and responsibility of this natural monopoly service should sit with a single independent regulated entity. Whether this is a contracted or mandated central entity or code body should be further explored as options. We urge Ofgem to be cautious when considering models that risk technical lock in to a single solution that cannot be changed if required. Pace is indeed a significant factor, but this should be weighted carefully against other risks across the various delivery models. The regulatory regime can be set accordingly in order to mitigate risks of slower pace.

As such, we support a single independent body, regulated by Ofgem, under licence that would ideally from a consumer perspective be a private commercial body, but in this instance, we can see arguments for a public sector entity being in the lead (with private sector service providers) which will need Ofgem's careful consideration.

It is critical to ensure that any built infrastructure is not lost to industry on any re-tendering or contract renewal process. Such risks may undermine market confidence and risk larger overall cost to the consumer in the case that infrastructure needing to be re-built at re-tender. Alternatively, there is a risk that the incumbent could inadvertently gain greater negotiating power. We recognise that the closest comparable model is the DCC with the Smart Meter systems and lessons should be learned from this experience when considering a delivery model for a flexibility exchange.

The regulatory regime must hold the delivery body to account for on time delivery, efficient cost management and delivery of outputs. The entity, and the regulatory regime under which it operates must be agile to be able to react to change of pace and circumstances. It is vital that there is accountability to all stakeholders and sufficient transparency of performance delivered.

We note that the FSO is one entity that Ofgem note may be interested in developing this work, and we agree that there are some synergies that could be beneficial. We also agree with Ofgem that the FSO is not the only party that could fulfil this role and we support wider exploration of such options.

There is a natural tension between the need for progress and intervention to seek delivery of the common infrastructure as soon as is practicable, with the need to ensure that delivery considerations are carefully assessed, and customers and industry do not pay the price for a rushed process. Ofgem should also ensure that the process is run openly with the ability for all to engage, decisions must be made by Ofgem in a timely manner, ensuring there is adequate resource and focus from the regulator to enable this project to continue to the pace indicated in the call for input.

Q11. What are the important areas for consideration when designing financial delivery models for a common digital energy infrastructure?

Whilst the call for input raises questions about the role of private finance and trust for data use and data privacy, clear regulation, accountability, licence obligations and legislation all mitigate against this risk and help build trust and legitimacy. There are a number of examples where public good programmes are funded by private investment (for example medical research).

Private funding, in general, leads to better outcomes for customers and avoids difficult choices for public finances which whilst always a consideration, is more so in the current cost of living crisis and as we emerge from the Covid pandemic and build on the green recovery and pathway to Net Zero for which this infrastructure is a key enabler.

Private funding should therefore be the preference, but to attract this the risk and reward will need to be fair and clearly set out for consumers and investors to mutually benefit. Benefits will be hard

to assign distributionally, and therefore we consider there are fairness limitations to any cost/benefit distribution proposals.

As this is intended to be national infrastructure, to unlock the potential of flexibility, and to support a market where CER and DER can enter without barriers, there is a strong case for socialised costs, in the way that the balancing market and other national markets are socialised at present.

Benefits of a deeper and more liquid market will benefit all consumers with lower balancing costs, and potentially lower network costs. Since the infrastructure will be a national one, we suggest its costs are recovered from nationally levied charges, such as via the charges of what is now the ESO or via suppliers who have national footprints. Whilst it is recognised that CER owners may benefit personally from market participation, it is not possible to estimate nor locate where this will be in any accurate way at this stage.