

# Energy Systems Catapult Response to Energy Networks Association: Open Networks Project Flexibility Consultation, July 2019

## Introduction

[Energy Systems Catapult \(ESC\)](#) was set up to accelerate the transformation of the UK's energy system and ensure UK businesses and consumers capture the opportunities of clean growth. The Catapult is an independent, not-for-profit centre of excellence that bridges the gap between industry, government, academia and research. We take a whole systems view of the energy sector, helping us to identify and address innovation priorities and market barriers, in order to decarbonise the energy system at the lowest cost.

We would be happy to discuss these issues in more detail if helpful. Please contact Vilislava Ivanova at: [vilislava.ivanova@es.catapult.org.uk](mailto:vilislava.ivanova@es.catapult.org.uk)

## Key Points

- We welcome ENA's flexibility commitments and ongoing work to develop and test procurement of flexibility services and to adopt common flexibility market principles among DNOs. Standardisation of products and processes is likely to ease access to new markets for innovators and support system-wide roll out of new services.
- As recommended in our [Energy Data Taskforce report](#), establishing standardised metadata and a Data Catalogue to provide dataset visibility across the sector would be key to unlocking value in a modern, digitalised energy system. We would welcome continuing engagement on the topic to support the development of ENA's visibility and accessibility principle.
- Creating a level playing field between technologies and services should include consideration of non-traditional and emerging providers who rely on the development of new business models and flexibility service platforms (e.g. aggregators, platform developers), and should seek to enable fair access for all providers, including generation, storage and demand-side response.
- We believe that work under planning for Workstream 4 – Whole Energy Systems should be considered in the ongoing development of flexibility services workstream to ensure a more integrated approach is taken to support efficiency improvements across electricity and gas.
- The integration of local markets within the wider system should also be considered at an early stage, with the goal of allowing all flexibility that can contribute to resolving a constraint to be used. This will enable the system to be balanced at the lowest possible cost, with no discrimination on the basis of the market or platform used.

## Detailed Response to Questions

### **Q1 - Do you agree with these six steps and if not, please provide us with any rationale?**

We strongly support the need to ensure a level-playing field between technologies and services, to open access to markets to a wide range of potential participants and to provide clarity on dispatch and reporting in a timely manner. A level playing field should be enabled for non-traditional and

emerging providers, relying on the development and provision of new business models and flexibility services (e.g. aggregators, platform developers), and enable fair access to generation, storage and demand-side response providers. The translation of these high-level steps into transparent and practical processes will clearly be key to unlocking value, so it will be important to engage widely with stakeholders to co-develop products and procedures.

**Q2 - Are there any steps that you believe are missing or any elements of these steps that are not covered by the Open Networks Project developments and products?**

Providing additional clarity on step two “Ensure visibility and accessibility” would be beneficial, specifically in the context of energy data. As recommended in our [Energy Data Taskforce report](#), establishing standardised metadata and a Data Catalogue to provide dataset visibility across the sector will be key to unlock value in a modern, digitalised energy system. Explicit consideration of data structures and interface standardisation as part of this step could be beneficial to unlock innovation and access to market for new flexibility service providers. Standardised approaches across the sector will reduce the need for innovators to digitally integrate to each network individually.

We also believe that consumers should be more explicitly acknowledged as a key element of energy system transformation. The development of ENA’s flexibility products should accommodate business models that rely on selling consumers their energy outcomes as a service or use other methods that reveals consumer preferences linked to flexibility provision (e.g. willingness to accept restrictions on power uptake at specific periods or willingness to pay for additional usage). Our research as part of the [Smart Systems and Heat \(SSH\) programme](#) suggests that radical new ‘smart energy service’ business models can align incentives throughout energy product and service supply chains, to improve integration and deliver better consumer experience. It is important to ensure that flexibility markets support innovation and are developed in a way that does not exclude those consumers with personal circumstances or characteristics that mean that they may not be able to access the same benefits of participation as other consumers. Whilst the perception is often that innovation will not benefit vulnerable energy consumers, there is a potential to harness the opportunities of innovation and pre-empt and mitigate risks<sup>1</sup>. Providing additional clarity on consumer protection and what steps will be taken to create appropriate processes for conflict resolution for potential future market participants relying on end consumer assets would also be beneficial (e.g. those relying on non-static assets capable of providing flexibility such as EVs).

**Q3 - Which elements do you believe should be prioritised and are there any suggestions to amend our workplan as a consequence?**

The integration of local markets within the wider system should also be considered at an early stage, including potential links between DSO and non-DSO-led local markets and existing national balancing mechanisms (potentially via intermediate regional levels). Drawing on ENA’s future world characteristics, we have started exploring the potential value generated by improved coordination

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<sup>1</sup> We have started exploring the opportunities for innovation to address fuel poverty, and better understand the issues faced by vulnerable energy consumers in the UK as part of our Fair Futures work. More information available here: <https://es.catapult.org.uk/impact/specialisms/fair-futures/>

between national and regional operations and the impact of different arrangements on parties<sup>2</sup>. We would welcome further engagement on this topic.

We believe that work under planning for Workstream 4 – Whole Energy Systems should be considered in the ongoing development of flexibility services workstream to ensure a more integrated approach is taken to support efficiency improvements across electricity and gas.

### **Flexibility Market Principles – Product 1**

#### **Q4 - Do you agree with these six principles underpinned by simplicity and if not, please provide us with any rationale?**

We welcome the inclusion of the [Energy Data Taskforce](#)'s recommendation that Energy System Data should be Presumed Open as part of principle three Transparency/ Visibility/ Privacy. We also support the adoption of principle five Interoperability of Solutions, which is informed by our previous work on interoperability in the energy sector<sup>3</sup>. We would welcome further engagement with the ENA and interested stakeholders to develop projects and translate these principles in practical processes.

We believe the principle for Coordination and Information exchange could acknowledge broader stakeholders, including innovators and non-traditional energy market participants, as key for the development of flexibility products and services. Understanding market participant requirements and capabilities should be an important element in the design of flexibility markets.

#### **Q5 - Are there any other principles that you believe we need to encourage more participation in flexibility?**

No further comments.

#### **Q6 – Is there anything in these principles that you think would compromise your ability to participate or should these principles be applied differently from the way set out in our paper?**

Not applicable.

#### **Q7 – We will apply these principles to all of our future development work – do you believe that there are any elements that are not covered by Open Networks Project developments or elements that should be prioritised?**

No further comments.

### **DER Services Procurement Review – Product 2**

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<sup>2</sup> As part of this work we published an initial report exploring how the DSO role could support the future power system, and the key issues around how future flexibility could be put to best use for all parties. The report is available at <https://es.catapult.org.uk/news/assessing-the-potential-value-from-dsos/>

<sup>3</sup> ESC (2018). Introduction to Interoperability in the Energy Sector, report available here: <https://es.catapult.org.uk/news/an-introduction-to-interoperability-in-the-energy-sector/>

**Q8 - Do you agree with the learning and 'good practice' highlighted in the report and can you provide any suggestions for any additional points to be considered and/or steps to implementation?**

Additional suggestions:

- To support market transparency, it would be useful to publish information on forecast methodology and scenarios used to estimate and signpost future long-term requirements for DSO Service needs.
- ENA's practice to log tenders is a good method to ease the communication of procurement requirements and support stakeholder engagement. It could be useful to publishing more detailed information on tender requirements in standardised format and making the information more easily discoverable and searchable for interested stakeholders.
- It would be beneficial to publish procurement guidelines akin to NGESO to provide clarity on which procurement approach (tender, direct contract, auction) would be used in which circumstances to build market confidence.
- Development of standardised contract terms for service provision and consistent description of DSO services would be key to ease market access, as highlighted in the procurement review document. Reporting on the progress of developing these steps would be beneficial in the context of revised project timelines.
- It is important to consider how future work on DSO Services Dispatch & Settlement Processes, and DSO Services Conflict Management & Co-optimisation would feedback in review of procurement processes, e.g. to inform new service development and ensure that future contractual arrangements take into account wider system interactions and provide clarity on responsibilities and party obligations linked to settlement and balancing.

**Q9 - What would be your preferred mechanism for engaging with DNOs for specific DSO Service design activities and/or procurement events?**

Not applicable.

**Q10 - In addition to the data set out in Appendix 2, what extra information might DER or market platforms require to support their involvement in the procurement of DSO Services?**

No further comments.

**DSO Services Commercial Arrangements – Product 4**

**Q11 – Do you agree with our Next Steps and the development approach to standardise contract terms and conditions set out in DSO Services Commercial Arrangements – Product 4 and do you have any suggestions to improve our proposed developments?**

Delivering a common set of Terms and Conditions across DNOs for DSO service delivery is a welcome approach to support market access for potential flexibility providers in the long run. Ensuring timely progress and appropriate stakeholder engagement would be key.

BEIS are currently supporting the development of a publicly available specification (PAS) 1879, which defines a standard for demand side response approach in the UK. It might be useful for the

ENA to be involved in the development of this standard and take it into account when developing commercial arrangements and services.

**Q12 - Do you have any feedback and comments on our Recommendations for Good Practice Adoption in Product 4?**

No further comments.

**Facilitation of New Markets – Product 6**

**Q13 – What new markets do you think we should consider as part of this work and do you have any proposed changes to the scope and nature of our development work to encourage flexibility market participation?**

We believe ENA should facilitate and support the development of all other markets not linked to direct DSO procurement listed under product 6, incl. peer-to-peer trading, capacity management, trading flexibility linked to constraints. Active and cooperative engagement with independent third parties willing to develop such markets is a crucial element of neutral market facilitation. Facilitation of the development of markets for capacity rights, or potential markets where long timescale transactions around network reinforcement can be compared against short timescale purchasing of flexibility should also be considered.

We support the consideration of data requirements as a key development element of this product (incl. what data needs to be provided by network entities to new markets, and what data needs to be shared with network operators linked to actions/trades conducted in such markets). We welcome further engagement on the topic.

**Stakeholder Engagement**

**Q14 – Do you have any ideas on how we might better engage and encourage feedback and input from non-traditional energy market participants?**

No comments.