

The Voice of the Networks



# Energy Networks Association

Open Networks Project

Flexibility Consultation 2020

31 July 2020

Energy Networks Association

Document Ref: ON-Project-Flexibility

## Introduction and background to the Open Networks Project

Launched in January 2017, ENA's Open Networks Project is laying the foundations for a smart energy grid in Great Britain and informing future developments in Ireland and Northern Ireland. It is a key initiative to deliver Government policy set out in Ofgem and BEIS' Smart Systems and Flexibility Plan, the Government's Industrial Strategy and the Clean Growth Plan.

The Open Networks Project has introduced real momentum into the development work required to enable GB's energy networks to:

- facilitate our customers' transition to a low-carbon future, including the electrification of heat and transport;
- address the challenges arising from the continued uptake of local generation;
- evolve to be market enablers for a whole range of new smart energy technologies;
- reduce costs to customers by contracting for flexibility services alongside investment in traditional and innovative network solutions; and
- play a key role in delivering overall lowest whole system energy system costs for customers.

In order to facilitate open debate and discussion across the industry, all outputs from the project are being published on ENA's website, alongside annual reports that summarise progress and achievements.

## Purpose of this consultation

The purpose of this consultation is to seek views from stakeholders on our flexibility developments to date and planned future developments in order for us to update and adapt our work accordingly. Therefore, the questions in this consultation are structured to:

- encourage as many stakeholders as possible, from a wide variety of viewpoints, to engage with our development work on flexibility;
- provide feedback on the content of our work to date; and
- help inform and shape the future work to be undertaken by ENA and the Open Networks Project to develop flexibility.

## How to engage and respond

This consultation will be open for eight weeks and closes on **25<sup>th</sup> September 2020**. Please send your responses to the consultation by email to [opennetworks@energynetworks.org](mailto:opennetworks@energynetworks.org).

While the consultation is open, you are invited to join two public webinars on **26<sup>th</sup> August 2020** and on **9<sup>th</sup> September 2020**. These will introduce and provide the opportunity to feedback on the consultation. Further details on these events and webinars will be provided on ENA's website and communicated to stakeholders on the project's mailing list. You can sign up for this mailing list [here](#).

All consultation responses are intended to be published on ENA's website as submitted identifying the respondent, therefore if your response is confidential and not for publication, please notify us clearly. Or, if elements of your organisation's response are confidential then please provide us with a full version for consideration and a non-confidential version for publication.

**Everyone is welcome to respond:** Feedback is welcomed from all stakeholders, including but not limited to: network users; energy market participants; network operators; independent distribution

<sup>1</sup> <http://www.energynetworks.org/electricity/futures/open-networks-project>

network operators; aggregators; suppliers; DER producers; consumers; community energy schemes; new and existing business models; and technologies businesses.

**Please respond as you can:** As with all of our recent Open Networks consultations, we would encourage stakeholders to respond in whatever format and with whatever level of detail they have time to respond with. If that is a few bullets with key points or a comprehensive answer to all of our questions, all feedback is welcome.

**How we will use your feedback:** Once this consultation closes and all responses are received, they will be summarised in a separate report. This summary report will be published.

## Next steps

The consultation closes on **25<sup>th</sup> September 2020**. Please send your responses to [opennetworks@energynetworks.org](mailto:opennetworks@energynetworks.org).

It is our intention to review the responses to this consultation and publish our comments on the feedback by the end of October 2020 on ENA's website<sup>2</sup>.

<sup>2</sup> <https://www.energynetworks.org/electricity/futures/open-networks-project/open-networks-project-stakeholder-engagement/public-consultations.html>

# Context of this Flexibility Consultation

## Introduction to Open Networks Flexibility Development

Last year, ENA's Open Networks Project established a dedicated Flexibility Workstream (Workstream 1A) and consulted on the developments across this workstream in July 2019, including the ENA Flexibility Commitment and next steps to implementation.

This year, we have continued that development work with a continuation of Workstream 1A focused on defining and developing transparency and standardised approaches across Distribution Network Operators (DNOs) and the ESO in their procurement of flexibility services, as well as initiating new work to design changes to facilitate and encourage new markets and platforms for flexibility (e.g. peer-to-peer trading).

We have also monitored the progress across all of the network companies towards the implementation of the next steps of the Flexibility Commitment<sup>3</sup> and this progress can be seen in the DSO Implementation Plan that was published last month<sup>4</sup>.

The proposals in this consultation document have been reviewed and tested with stakeholders through the Open Networks Advisory Group and focus groups for some products. This consultation is an opportunity to test these proposals with all interested parties.

## Consultation Approach

We set out a programme of development work for Workstream 1A in our Workplan and Project Initiation Document (PID) for 2020s and we are presenting the latest position across all of those identified products in this consultation. We have sought to advance firm proposals for these areas of work where possible and consulting on these as proposals enables us to make progress towards implementation.

We would like to make responding to this consultation as easy as we can for stakeholders, therefore we have tried to keep consultation questions to a minimum and have not stipulated any particular format. We ask a key generic question on our proposals to date and then any more specific questions for particular products that we need guidance on to progress. We hope this reduces the burden on stakeholders to respond.

As with all of our recent Open Networks consultations and as above, we would encourage stakeholders to respond in whatever format and with whatever level of detail they have time to respond with. If that is a few bullets with key points or a comprehensive answer to all of our questions, all feedback is welcome.

## Flexibility Workstream 1A Development

Our Workplan and PID set out the following key objectives of this workstream:

1. Deliver on the themes and expectations from the Ofgem/BEIS Open letter<sup>6</sup>, as set out in ENA's response.
2. Standardise processes and methodologies for flexibility procurement across network and system operators.

<sup>3</sup><http://www.energynetworks.org/assets/files/ENA%20Flexibility%20Commitment%20Our%20Six%20Steps%20of%20Delivering%20Flexibility%20Services.pdf>

<sup>4</sup> <https://www.energynetworks.org/electricity/futures/open-networks-project/dso-implementation-plan.html>

<sup>5</sup> <https://www.energynetworks.org/assets/files/ON-PRJ-2020%20PID%20Post-Consultation-PUBLISHED.pdf>

<sup>6</sup> The Open Letter and our response can be found here: <https://www.ofgem.gov.uk/publications-and-updates/open-letter-ena-open-networks-project-ofgem-and-beis>

3. In discussion with platform and flexibility providers, identify and implement actions to facilitate the development of flexibility marketplaces and the participation of flexibility providers, for example common product descriptions, etc.
4. Demonstrate transparent processes for evaluating flexibility tenders, ensuring outcomes are transparent, predictable and justified.
5. Implement measures that provide confidence in independence of decision making.
6. Monitoring implementation of Flexibility Commitments on a six monthly basis.
7. Raising appropriate change within electricity network companies and/or electricity Codes.
8. Identifying any barriers to development where we may need Ofgem or BEIS policy intervention.
9. Facilitate markets outside the direct procurement of service by DNOs to allow third parties to develop effective and liquid market platforms for customers to realise value for flexibility.

We translated these objectives into a set of deliverables and a package of development work that is set out diagrammatically in Appendix A, as per the 2020 Workplan and PID.

We have further developed two elements of Product 5 from 2019:

- The Interactions between Flexible Connections (ANM) and Flexibility Services.
- DNO Flexibility Services Revenue Stacking.

We have developed the following 2020 products with a focus on delivering the benefits to customers of standardisation, transparency and confidence in the transparency and independence of decision-making, as per the objectives:

1. Common Evaluation Methodology.
2. Procurement Processes.
3. Active Power Services Parameters.
4. Commercial Arrangements.
5. New DSO Services.
7. Baseline Methodology.

The following product is under development to deliver against the objective of facilitating markets for customers outside the direct procurement of DSO services:

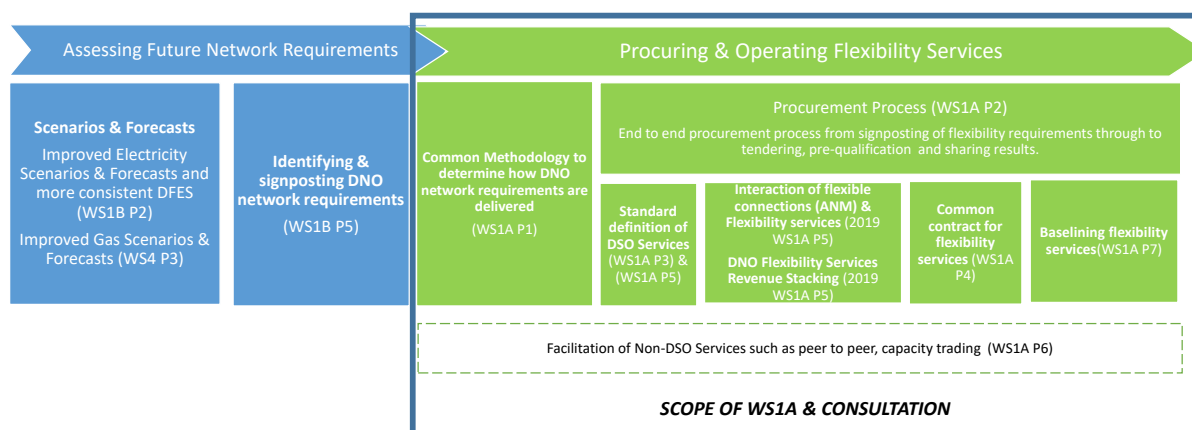
6. Market Facilitation – Non DSO Services.

This consultation will report on our development work to date on all of these products and we will share our development work to date in turn below and ask any specific questions against the current outputs.

There are reports and outputs associated with all of these products which will be published separately from this consultation paper but referred to against each of the sections below.

## Context of Workstream 1A Development Work

There are a number of other areas of development within the Open Networks Project that are linked to the work defined in this consultation paper and the diagram below shows how these are linked through the natural lifecycle of assessing future scenarios and forecasts, identifying network requirements, assessing the best way to meet those requirements and then procuring and delivering flexibility services where they are the optimum solution:



*A number of other Open Networks products enable and support the operation of flexibility services. WS1B P3 (Real Time Data Exchange) is looking at additional T-D data exchange that supports the selection and operation of flexibility services. WS2 P1 (System Wide Resource Register) provides information on DER that provide flexibility services.*

We are consulting on the Flexibility Workstream elements of this lifecycle in this paper.

# Contents of this Flexibility Consultation

## Common Question for all Products

There is a generic question that we would like to ask of all of our proposals:

***Q1 – Do you agree with our proposals within this consultation paper and if not, please provide us with any rationale and alternative proposals? This feedback can be generic to our proposals or provided on a product by product basis.***

In addition to this generic question, we have more specific questions against the individual sections below where they apply, but please provide feedback as above against all papers and proposals where you can.

## Common Evaluation Methodology – 2020 Product 1

Product 1 aims to deliver a common evaluation methodology and tool for DNOs to assess flexible vs non-flexible options to meet network needs. This product is at the heart of a number of our objectives and flexibility commitments, including championing a level playing field, neutral market facilitation and transparency of evaluation and decision-making for stakeholders.

We have been working with Baringa Partners to develop a common evaluation methodology and tool for DNOs to use when assessing the different options to meet network needs, including Cost Benefit Analysis. This product:

- addresses a key action outlined in the Ofgem and BEIS Open Letter to the ENA; and
- will provide transparency and alignment on how DNOs make decisions in the pre-procurement stage to choose the most suitable solution from options such as ANM schemes, Flexibility Services, reinforcement, or others (including non-firm connections).

It includes the development of a common flexibility valuation methodology which has been translated into a tool that can be used by DNOs as well as by stakeholders to understand how different options will be assessed.

The output from this product development is published as:

- a report on the methodology used, including requirements, options considered (including how to assess losses, carbon and optionality), point of view of economic assessment and the outputs, including example use cases; and
- an MS Excel based Evaluation Tool including a User Guide.

The proposals are a baseline that can be developed further under open governance.

It is planned that DNOs will start to use the common evaluation methodology from, at the latest, 1<sup>st</sup> April 2021 and an implementation plan will be published by 31<sup>st</sup> December 2020.

The PID for this Product also identified that over autumn and winter 2020 the Product team would develop open governance arrangements for the common evaluation methodology and the tool.

Following early discussions on open governance, the Product team are proposing to:

- 1) Publish the common evaluation methodology statement, the tool and the user guide on the ENA website and on the individual DNO's websites;
- 2) Use the ENA's administration capability for the open governance of the common evaluation methodology; and

- 3) Form a Users group, under the ENA, for the ongoing development of the methodology and the tool.

## **Procurement Processes – 2020 Product 2**

As committed in our response to the Ofgem and BEIS Open Letter<sup>7</sup>, we completed a review of the existing processes for the assessment and award of flexibility contracts earlier this year and we published a report on existing practice across the six DNOs in how flexibility is currently procured from service providers [here](#). This report also completed a gap analysis to determine a plan for alignment.

We have now looked at the opportunities for alignment and good practice through the procurement lifecycle where we have found that it adds value for customers, including the process and evaluation of tenders. The areas of alignment we have set out in our Product 2 presentation for consultation are:

- 4 assessment stages for companies/assets within the flexibility procurement cycle;
- alignment of assessment stages within the flexibility procurement cycle; and
- alignment of milestones within the flexibility procurement cycle.

It should be noted that the commercial terms for procurement (including indemnity and liability clauses) are being progressed under Product 4.

***Q2 – Would stakeholders see greater value in holding PQQ stages (1,2 in the associated presentation) at point A or point B in the timeline with rationale?***

***Q3 – Do you agree with the alignment of timing for procurements on the proposed cycle of 2 procurements per year and if not, why?***

## **Active Power Services Parameters – 2020 Product 3**

We have reviewed the existing service parameters for the Sustain, Secure, Dynamic and Restore DSO services and sought to find further parameters to standardise as part of the common service offer and to embody into the common contract.

These are set out in a report including a plan for implementation of the new standard parameters, supported by a set of supplementary definitions.

***Q4 – Do you agree that implementation of these consistent parameters helps to remove barriers to entry?***

***Q5 – Should any other parameters be considered and if so, why?***

## **Commercial Arrangements – 2020 Product 4**

Working with law firm CMS, Open Networks published a standard contract for the procurement of flexibility and an associated implementation plan in March 2020.

This is a key deliverable to provide consistency for customers in contractual terms across our standard DSO services as the first national common flexibility contract and will be introduced by all network operators by the end of 2020.

The contract has been drafted by all of Britain's DNOs and takes into account vital input from the industry. The contract will be used by all of Britain's DNOs for procuring flexibility, as it seeks to improve the customer journey and ease engagement with the energy system. The standard contract and implementation plan can be accessed and downloaded from the ENA website [here](#).

<sup>7</sup> <https://www.ofgem.gov.uk/publications-and-updates/open-letter-ena-open-networks-project-ofgem-and-beis>



This contract has been subject to stakeholder review and we are currently reviewing that feedback for consideration in the next release of the contract. We are not consulting explicitly on the contract as part of this consultation.

Release 2 of the standard contract is currently in development, which will focus on alignment between DSO and ESO services as well as the consideration of stakeholder feedback on release 1. We will continue to engage and seek input from stakeholders through the development process in 2020 (e.g. with the Open Networks Advisory Group) in advance of publishing release 2 for formal consultation in December 2020 with a target to publish release 2 of the contract in March/April 2021.

## **New DSO Services – 2020 Product 5**

We will begin work on this product with a review of services later in the year and we will include stakeholders in our development work (e.g. through the Advisory Group).

There is a balance to be struck in standardising products. We need to ensure that there is enough experience of using new products to be able to learn and reflect on their use before standardisation. It is important not to stifle the innovation and development of new products through standardisation too early.

***Q6 – At what point do you believe it is appropriate to standardise new products? For example, should we initiate standardisation early on limited experience, or allow more than 2-3 DNOs to develop and procure similar products before commencing standardisation?***

***Q7 – Which new DSO services do you believe are ready for standardisation now, if any, and why?***

## **Market Facilitation – Non DSO Services – 2020 Product 6**

We have published an interim report into the investigation of current trials and innovation projects and future opportunities to facilitate non-DSO service markets.

The report is interim at this stage and we are keen to use the remainder of 2020 to identify quick wins in the development and understanding of non-DSO services. We would like the input from stakeholders into the questions below to help us identify key opportunities and prioritise our work.

***Q8 – What input can you provide to help us prioritise non-DSO Service development:***

- what do stakeholders want network operators to facilitate in the near term?***
- how can network operators facilitate non-DSO services whilst ensuring system resilience?***
- how do network operators create scalable interfaces that allow these markets to flourish?***

## **Baselining Methodology – 2020 Product 7**

A baseline is the established level of DER base load from which a delta is measured to calculate level of service delivered. For distribution flexibility, base load is usually measured over a historic period (previous week/month) to establish an average baseline, this average is the point from which any delivery of flexibility is measured. Using average baselines from historic base load data enables DER stackability with other markets.

The work to be undertaken by Product 7 was identified during gap analysis carried out in the 2019 ON WS1A programme under Product 3 – Dispatch & Settlement. To date each DNO/DSO has developed their capability in flexibility supporting differing methodologies to establish baselines. While the DNOs' experience operating flexibility is still in its infancy, it is likely to be impractical to establish good practice. However, it is agreed that potential alignment in this area will benefit both providers and the DNOs, and an assessment of existing practices will be undertaken.

The approach to be taken to this work is:

- ON P7 Product team to establish Distribution Flexibility Baseline Principles
- Appoint a consultant to research existing baseline practices and compare merit to principles
- Make recommendations for standardisation

We attach a scope of work for the consultants to this consultation for visibility of the draft scope of work we intend to commission.

***Q9 – What challenges are flexibility providers currently facing in respect of baseline requirements?***

***Q10 – Open Networks Project will consider if differing DER types such as demand turn up, storage, generation etc should be subject to different methodologies. Do you feel this would be a fair outcome for providers or, would a simple one-size fits all approach encourage more participation?***

***Q11 – Are there any other key aspects Open Networks should consider when investigating potential methodologies?***

## **The Interactions between Flexible Connections (ANM) and Flexibility Services – 2019 Product 5**

Our Flexibility Workstream carried over some work from 2019 to better explain the interaction between flexible connections enabled with Active Network Management (ANM) and flexibility services. This paper sets out the historical context; describing the two resources and the system need(s) they address, including their characteristics and the current levels of interaction.

It also considers how the connections and services may need to evolve in the future and in particular, how more interaction could be facilitated in the short and medium term (within RIIO-ED1) and into the future (RIIO-ED2).

***Q12 – Please provide feedback on the proposed future activity for consideration and which of these activities should be prioritised in any future scheduled development work in the Open Networks Project?***

***Q13 – Under the current arrangements to do you receive sufficient information, in the right format, and at the right time to be able to manage your curtailment risk effectively?***

***Q14 – Are there barriers preventing customers with assets with Flexible Connections (ANM) providing flexibility services to the ESO or DSO today?***

***Q15 – How could DNOs better enable customers with Flexible Connections (ANM) to use Flexibility Services to mitigate the current and future curtailment?***

## **DNO Flexibility Services Revenue Stacking – 2019 Product 5**

Our Flexibility Workstream carried over some work from 2019 to better explain how DSO services can be stacked with other services (e.g. ESO services) to deliver commercial benefits to customers.

There are many revenue streams available to operators of flexible assets for the provision of network and system support services. In order to maximise the value from those assets, flexibility service providers are increasingly seeking to dynamically “stack” revenues – which can mean both the stacking of multiple streams in the same time period, as well as moving between revenue streams in different time periods to take advantage of opportunities at different times of the day, referred to as “jumping” between the most optimal revenues.

The revenue stacking report considers how revenues from providing flexibility services to DNOs can be incorporated into a flexibility service provider's revenue stack and any barriers which exist to such revenue stacking.

***Q16 – Please provide feedback on the identified barriers and proposed recommendations and which of these recommendations should be prioritised in any future scheduled development work in the Open Networks Project?***

## **Residential Flexibility**

This consultation is targeted at all flexibility providers, not just I&C (Industrial and Commercial) customers, but residential and small-scale business customers too. We see the potential for large amounts of flexibility to be provided by residential and small-scale business customers in the future. While still nascent in terms of penetration, residential properties will include a range of different flexible DER technologies such as heat pumps, storage, EVs and flexible loads. Early adopters are already installing these technologies, and the uptake rates are increasing rapidly as we move towards net zero. By providing flexibility to networks, these customers will be able to access new revenue streams for their flexible devices, and help lower bills for network customers overall. We want to understand how to further unlock residential flexibility, and we want to hear about potential barriers and opportunities for providing flexibility to networks.

***Q17 – Do you have any ideas on how we might better engage and encourage participation of residential flexibility in flexibility service provision? Can you identify any barriers that might currently exist, along with potential solutions?***

## **Stakeholder Engagement**

Whilst we have very strong engagement from a wide range of stakeholders, including innovators and disruptors through innovation projects and stakeholders through our Advisory Group (including connecting/connected customer and consumer representation), we would welcome views on how we might improve our stakeholder management.

***Q18 – Do you have any ideas on how we might better engage and encourage feedback and input from stakeholders (including non-traditional energy market participants)?***

# Appendix A – Product Development Plan from PID

