Introduction

About ENA

Energy Networks Association (ENA) represents the owners and operators of licences for the transmission and/or distribution of energy in the UK and Ireland. Our members control and maintain the critical national infrastructure that delivers these vital services into customers’ homes and businesses.

About Open Networks

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.

ENA’s Open Networks Project is key to enabling the delivery of Net Zero by:

- Opening local flexibility markets to demand response and distributed energy resources, increasing renewable energy and new low-carbon technology, and removing barriers to participation
- Providing opportunities for these flexible resources to connect to our networks faster
- Opening data to allow these flexible resources to identify the best locations to invest
- Delivering efficiencies between the network companies to plan and operate secure efficient networks

The Open Networks Project has introduced real momentum into the development work required to enable GB’s flexibility services market by:

- Delivering on the themes and expectations from the Ofgem/BEIS’s Smart Systems and Flexibility Plan
- Standardising processes and methodologies for flexibility procurement across network and system operators.
- Identifying and implementing actions to facilitate the development of flexibility marketplaces and the participation of flexibility providers, for example common product descriptions, etc.
- Demonstrating transparent processes for evaluating flexibility tenders, ensuring outcomes are transparent, predictable and justified.
- Raising appropriate change within electricity network companies and/or electricity Codes
- Facilitating markets outside the direct procurement of service by DSOs to allow third parties to develop effective and liquid market platforms for customers to realise value for flexibility.

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.

Everyone is welcome to respond: Feedback is welcomed from all stakeholders, including but not limited to: network users; energy market participants; independent distribution network operators; aggregators; suppliers; DER producers; Flexibility Service Providers; consumers and consumer groups; community energy schemes; new and existing business models; and technology businesses.

How to engage and respond

This consultation will be open for eight weeks and closes on 24th September 2021. Please send your responses to the consultation by email to opennetworks@energynetworks.org.

While the consultation is open, you are invited to join two public events, a webinar on 18th August 2021 and an online event in partnership with BusinessGreen on 8th September 2021, titled ‘Flexible futures: Exploring the role of flexibility in the net zero transition’. These will introduce and provide the opportunity to feedback on the consultation. Further details on these events will be provided on ENA’s events webpage and communicated to stakeholders on the project’s mailing list. You can sign up for this mailing list on our website and ask questions by emailing the Open Networks project.

All consultation responses are intended to be published on ENA’s website, 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.

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 24th September 2021. Please send your responses to 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 2021 on ENA’s website.
Introduction to Open Networks Flexibility Development

Background

To deliver net zero and meet our carbon commitments, while providing reliable and secure electricity supplies at least cost, GB needs: more sources of renewable energy connected to the networks, an electricity system that can facilitate both the production and consumption of electricity more flexibly, and regulatory and policy frameworks that support this transition.

Generation is becoming more distributed and variable, and consumers are benefitting from new ways of managing their energy usage. GB’s net zero carbon ambition is driving significant transformation of the electricity system, locally at distribution level and nationally at transmission. System flexibility enables networks to deliver this more efficiently.

The Open Networks Project is a critical contributor to the wider whole energy system transition to net zero carbon; and in particular the Ofgem/BEIS Transitioning to a Net Zero Energy System: Smart system and Flexibility Plan 2021.

Flexibility Commitment

ENA launched the ‘ENA Flexibility Commitment’ with a six-step implementation plan in June 2019. In 2019 ENA’s Open Networks Project established a dedicated Flexibility Workstream (Workstream 1A) to deliver on this commitment. Since the launch of this dedicated Flexibility Workstream, Open Networks and the network operators have made significant progress on Flexibility Services with around 3GW of flexibility planned for tender by GB Distribution Network Operators (DNOs) in 2021.

This Workstream has played a key role in helping all DNOs to prioritise flexibility and deliver against their flexibility commitment. Building on past milestones, this year we have continued the development work of WS1A with a decision to prioritise products that will ensure we deliver tangible change in areas of priority for Ofgem, BEIS, and industry stakeholders. It is recognised that this is an ambitious programme, and we continue to monitor progress closely.

In addition to the annual project initiation document (PID) we have also published a complementary Flexibility Roadmap that provides a broader view of work that we have and are planning to deliver under Open Networks. This roadmap demonstrates the traceability of our development work to our Flexibility Commitments and Next Steps for Implementation as well as a consolidated list of key stakeholder issues that have been raised through our flexibility consultation and interactions with stakeholders. This roadmap also provides a forward-looking view of work beyond 2021 and signposts key industry developments that are feeding into our work. The Flexibility Roadmap will be updated in Q3 2021 to reflect the latest view of work.

We continue to monitor the progress across all of the network companies towards the implementation of the next steps of the Flexibility Commitment and this progress can be seen in the DSO Implementation Plan.

Since 2018 we have also monitored the growth of the flexibility services market, publishing a flexibility services market breakdown showing the volumes of flexibility tendered, and volumes contracted per DNO, per flexibility product, per year. These figures are updated bi-annually and published on the ENA website.
A summary of the growing flexibility services market size in GB is shown in the table below:

<table>
<thead>
<tr>
<th>DSO Flexibility Tenders (Industry Total)</th>
<th>Sustain (MW)</th>
<th>Secure (MW)</th>
<th>Dynamic (MW)</th>
<th>Restore (MW)</th>
<th>Reactive Power (MVAr) (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Peak Capacity (MW)</td>
<td>Peak Capacity (MW)</td>
<td>Peak Capacity (MW)</td>
<td>Peak Capacity (MW)</td>
<td>Peak Capacity (MVAr)</td>
</tr>
<tr>
<td>Contracted for 2018</td>
<td>0</td>
<td>24</td>
<td>34</td>
<td>59</td>
<td>0</td>
</tr>
<tr>
<td>Contracted for 2019</td>
<td>0</td>
<td>10</td>
<td>121</td>
<td>125</td>
<td>0</td>
</tr>
<tr>
<td>Contracted for 2020</td>
<td>2</td>
<td>105</td>
<td>556</td>
<td>502</td>
<td>0</td>
</tr>
<tr>
<td>Tendered for 2020</td>
<td>14</td>
<td>493</td>
<td>771</td>
<td>778</td>
<td>7</td>
</tr>
<tr>
<td>Contracted for 2021</td>
<td>13</td>
<td>263</td>
<td>730</td>
<td>603</td>
<td>0</td>
</tr>
<tr>
<td>Tendered for 2021</td>
<td>31</td>
<td>692</td>
<td>1203</td>
<td>955</td>
<td>9</td>
</tr>
</tbody>
</table>

Around 3GW of flexibility has been planned for tender this year, with a steady increase in contracted capacity across all products type. As of July 2021, an impressive 1.6GW has already been contracted which is an increase of 45% since 2020 when 1.1GW was contracted in total.
Workstream 1A Development

In previous years this workstream has defined common Flexibility Services and delivered alignment across DNOs on procurement activities including how and when tenders are assessed by DNOs.

Broadly Workstream 1A explores two main areas: Flexible Services, Flexible Connections (and Non-DSO services).

- The Flexibility Service is a commercial mechanism which requires participants to deliver a change in their usual power flows in real-time or at times requested by the DSO. It is a market-led initiative that, through procurement exercises, finds customers’ assets located within constrained networks that are able to deliver flexibility to help manage constraints.
- Flexible Connections (ANM) are connection options where, in return for a faster cheaper connection, the participant accepts a contractual, mandated requirement for their usual power flows to be changed by the DNO remotely, in real time, through automation. The amount of change, or curtailment, varies as per the connection agreement. For more information, please refer the Flexible connection primer document that shall be published on ENA’s website soon.

In 2021, Workstream 1A builds on previous developments to focus on defining and developing transparency and standardised approaches across DNOs and the ESO in their procurement of Flexibility Services. It is also initiating new work to design changes to facilitate and encourage new markets and platforms for flexibility (e.g. peer-to-peer trading). In addition, we have a number of products looking to mitigate stakeholder concerns with Flexible Connections facilitated by ANM schemes. The interaction between ANM and flexibility services was identified early in 2020 as a key priority and this was confirmed in discussion with BEIS and Ofgem and by stakeholders in the Advisory Group, bilateral engagements and their responses to the Flexibility consultation. It was agreed that the focus should be on making progress in areas that did not directly rely on a decision from Ofgem's Access and Forward-looking Charges SCR.

Our Workplan and PID set out the following key objectives of this workstream for 2021:

- Bring more transparency in how DNOs facilitate local markets for flexibility and make decisions to provide more confidence in independent decision making.
- Simplify participation in local flexibility markets through standardisation of approaches across DNOs and between DNOs and the ESO.
- Address barriers to participation in flexibility markets and facilitate stacking of revenues across multiple markets.
- Address industry concerns around the use of Flexible Connections, with Active Network Management (ANM) schemes, and its interaction with Flexibility Services in the current access regime; and consider future arrangements in light of Ofgem’s ongoing work on the Access and Forward-Looking Charges SCR.
- Enable new markets (outside the direct procurement of services by DSOs) to help customers realise more value from flexibility and allow more effective use of network capacity.

We translated these objectives into a set of deliverables and a package of development work that is illustrated diagrammatically in Appendix A, as set out in the 2021 PID.
We have developed the following 2021 products with a focus on delivering the benefits to customers of standardisation, transparency, confidence in the transparency, and independence of decision-making, in line with the objectives:

1. Enhancements to the Common Evaluation Methodology (CEM) and the CEM Tool used to evaluate flexibility and traditional intervention options.
2. Alignment of Flexibility Services procurement processes and timescales between DNO and ESO.
3. Principles to review Flexible Connection (Active Network Management) contracts.
4. Improvement to existing commercial arrangements - Standard Agreement for procuring Flexibility Services.
5. Defining ‘Primacy Rules’ for the ESO and the DNOs to manage service conflicts.
6. Support non-DSO services (such as peer-to-peer) and align/utilise their proliferation for grid resilience.

As in previous years, we report mid-year on our progress for all of these products and seek feedback via specific questions against the current outputs. The product reports and associated outputs are published separately from this consultation paper but referred to in each of the sections below.

Context of this Flexibility Consultation

We set out a programme of development work for Workstream 1A in our Workplan and Project Initiation Document (PID) for 2021 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, consulting on these proposals helps us incorporate industry knowledge and perspectives to ensure more useful and effective outputs.

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

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. There are broader questions for each proposal with some more specific questions for individual products. We hope this reduces the burden on stakeholders to respond.

Please respond as you can: As with all of our Open Network’s consultations, we would encourage stakeholders to respond in whatever format and with whatever level of detail they have time to respond with. Whether that is a few bullets with key points or a comprehensive answer to all of our questions, all feedback is welcome.
Contents of this Flexibility Consultation

Broader Questions for Workstream 1A

There are three generic questions that we would like to ask:

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.)*

Q2 – *Are you aware of the Flex figures being published each year on ENA Website. How does your understanding of GB’s growing Flexibility market size help you and how are you using this information?*

Q3 – *Open Networks members are committed to implementing outputs and driving the benefits identified. Which product or area would faster implementation of the outputs be most desirable?*

In addition to the generic questions, 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.

Product Description and Specific Questions

**2021 Product 1 (ON21 WS1A P1): Enhancements to the Common Evaluation Methodology (CEM) and CEM Tool used to evaluate flexibility and traditional intervention options.**

In 2020, the baseline Common Evaluation Methodology and CEM Tool developed in the Open Networks went live together with the user guide. This tool is intended to be used by the DNOs to evaluate Flexibility Services and traditional intervention options for an identified network need. This 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).

Input from past engagements with the Advisory Group and consultation responses acknowledged the relevance and applicability of this tool and agreed that the ongoing development of the methodology and tool should include optionality and carbon impact assessments. In 2021, the product aims to review and consider these enhancements to the Common Evaluation Methodology and the CEM Tool.

**User Forum approach under Open Governance**

As set out in the PID, the WS1A Product 1 (Common Evaluation Methodology (CEM) and CEM Tool) has been identified as a product in 2021 that will help to develop, trial, and inform our work on Open Governance, as we aim to create collaborative approaches for the governance and change management of key developments from the Open Networks project. An updated CEM was chosen this year to be delivered via a User Forum approach that would enable industry representatives to join the product team and deliver the next version of the CEM. As part of setting up the first Open Networks User Forum, we engaged with the Advisory Group to develop the arrangements and Terms of Reference and launched a call for industry participation in June.
To date, the interest in joining this User Forum remains low and does not cover the breadth of industry representation that would be necessary to run this forum successfully. We have therefore made a decision to put the User Forum on hold until we can get sufficient representation across the sector. In the interim, we will kick off work to deliver the next iteration of the CEM by December, as planned. As part of this, we will continue to get stakeholder feedback via existing channels including the Advisory Group.

The Open Networks project remains keen to further explore opportunities for delivering change more collaboratively with the industry. To best inform this, we are keen to further understand the lack of response to this call for participation and we will take this into consideration into our work on Open Governance to inform future arrangements.

Q4 – What factors do you believe has led to the lack of response to the call to join the User Forum for the CEM this year? Were you aware of the proposal?

Q5 – We are keen to understand whether our model of open governance for the User Forum was a factor in the lack of response, do you believe that a User Forum approach would be useful to consider for progressing key products next year or are there alternative approaches that we should consider?

2021 Product 2 (ON21 WS1A P2): Alignment of Flexibility Services procurement processes and timescales between DNO and ESO

In previous years, this product has delivered alignment across DNOs on activities relating to Procurement of Flexibility Services. This product is a continuation of 2020 WS1A P2 that developed a proposal for alignment across DNOs in the assessment stages and milestones in the flexibility procurement cycle. Feedback from stakeholders from the ON Flexibility Consultation in 2020 indicated support for convergence on timelines and timescales of procurement processes across all networks, both transmission and distribution. There was a preference to converge on timescales (key milestones and durations) rather than timelines (when procurement takes place) as flexibility providers may wish to bid into multiple markets and regions.

In 2021, the product has focused on investigating the potential for further alignment of procurement timescales between the DNOs and the ESO (including consideration of the Capacity Market), and detailed reviews have been undertaken to identify and assess the range of options.

After this review, the P2 team are of the view that it may not be currently advisable or of particular value to create concurrent market procurement timelines across DNOs and the ESO and this paper captures the supporting context and rationale. The P2 team are however fully aware of the drive for alignment and the need to move towards closer to real time procurement. We are keen to work with market participants to seek their views on this and to understand how we can better facilitate participation in flexibility markets today. We wish to understand if not aligning at this stage will prevent broader participation. We welcome feedback on the options analysis on what further alignment can be achieved, particularly between now and the start of ED2 in 2023.

Additionally, this paper also proposes further improvements to how we share and communicate upcoming procurement milestones across DNOs and the ESO. The purpose of this proposed activity is to maximise visibility of upcoming opportunities for providers by creating a single, accessible source of information for market participants and we welcome views on how we can improve this further.
Q6 – Do you agree with the P2 team’s findings regarding the alignment of DNO and ESO timescales? Please provide your rationale and any supporting evidence that we can use to inform our approach, particularly in short – medium timescales (now – start of ED2)?

Q7 – How could we further evolve alignment of procurement processes in future?

Q8 – Do you agree that the proposed improvements to visibility of requirements will be of direct benefit to your sector of the industry, if so, please share your rationale and how you would utilise this information? Do you have thoughts on how we can improve visibility further?

2021 Product 3 (ON21 WS1A P3): Principles to review Flexible Connection (Active Network Management) contracts.

Using work developed under 2019 WS1A “The Interactions between Flexible Connections (Active Network Management enabled) and Flexibility Services”, this product aims to understand the content and range of curtailment information and approaches in legacy Flexible Connection contracts across all DNOs.

This product also set out to consider routes for exiting such contracts. Flexible Connection (ANM) contracts, and the degree of curtailment risk, is often fixed at the point of connection, whilst the value users place on network access can vary over time. In addition, constraints change over time, and the curtailment requirements and windows, determined at connection, may need revisions. It was understood that there was no formal process for enabling customers to exit Flexible Connections (ANM) and move to a standard (firmer) connection. This product had planned to identify principles to apply to contract reviews to facilitate such exit strategies. However, the work to date has identified that a standard process does currently exist to allow customers to exit a Flexible Contract. The Product is now focused on improving the visibility and communications of this process.

Sample contracts from all the DNOs have been reviewed to assess current approaches and a Flexible Connection (ANM) Stakeholder Focus Group was also engaged to review the findings and their feedback incorporated into the next steps and Product Report.

The report looks at the degree of contract standardization across all the DNOs; provides an overview of curtailment practices; and sets out any major differences / best practice / learnings from the review.

Main headlines included:

- **Customer Flexible Connection (FC(ANM)) Contract Exit**: options exist currently via the modification request (G99 Form) process often supplemented with DNO Surgeries (or equivalent).
- **Standardisation**: FC(ANM) contracts tend to be fairly standard; most use a standard contract with the details of the ANM scheme included in an appendix or have the same information contained within the connection agreement.
- **Technical and Commercial arrangements**: at high level, the arrangements / requirements for the Flexible Connections are similar.
- **Curtailment information**: information provided to the customers at connection tend to vary significantly by DNO (due to modelling and charging differences) although the core principles are the same. Ongoing curtailment information / annual reviews also vary by DNO.

Next steps include considering:
• whether DNOs should signpost better the customer option to request a modification to their connection agreement more proactively and how this might be accommodated.
• the need / benefits of a common Flexible Connection (ANM) agreement, given how similar the existing Flexible Connection (ANM) contracts are currently.
• if the variances in approach identified, e.g. the two-stage connection offers and pre-agreed ‘Planned Interruptible Capacity’ approach, should be features offered by all DNOs in their Flexible Connections (ANM) contracts; and
• whether DNOs should offer an (additional) service where a far more granular view of curtailment risk with additional sensitivities etc. is provided with the Flexible Connection (ANM) contract and / or whether third party routes offer useful alternatives to the DNO curtailment assessment.

Q9 – Do you agree that there is an exit route, using the current G99 approach, for existing FC(ANM) customers who want access to firm(er) connections? If not, what do you see as the barriers?

Q10 – Do you agree with the findings of the Product 3 report and if so, which area(s) are of most interest going forward?

2021 Product 4 (ON21 WS1A P4): Improvement to existing commercial arrangements - Standard Contract for procuring Flexibility Services.

In April 2020, Version 1.1 of the Standard Contract for procuring flexibility (by all GB DNOs) was implemented by the product team.

In 2021, Product 4 is scoped to improve the Standard Contract based on the feedback received on Version 1.1. This feedback suggested amendments to liability, indemnity, and insurance (L, I & I) elements, and a review of the ability and evolution required to enable DNOs to adopt a framework approach to securing Flexibility Services similar to the ESO’s suite of services.

The product team published Version 1.2 of the Standard Contract in February 2021. This version has been updated in response to both stakeholder feedback, and the DNOs’ experience of using Version 1 and 1.1. Version 1.2 has slimmed down the core “Contract” to 20 pages with 7 Schedules, providing increased alignment with ESO approach.

An Evolution Paper was also published exploring key challenges to achieving full alignment of DNO and ESO procurement practises. It describes the extent to which the ESO and DNO procurement/contract processes currently differ and sets out an approximate timetable for delivering future alignment.

Development of Version 2.0 of the Standard Contract, to address feedback on the Liabilities and Indemnities work, continues and is scheduled for publication and consultation in September 2021. The product team will also confirm a single approach for implementation between DNOs and the ESO. Given the September consultation no specific feedback is sought in this Flexibility Consultation.

2021 Product 5 (ON21 WS1A P5): Defining ‘Primacy Rules’ for the ESO and the DNOs to manage service conflicts.

Building on work undertaken in 2019 under Open Networks (2019 WS1A DSO Services – Conflict Management, Co-optimisation, and DSO Revenue Stacking), this product will develop a set of principles and primacy rules for
addressing flexibility service conflicts when both the DNO and the ESO are seeking to procure flexibility from the same Flexibility Service Provider (FSP). This task is pertinent due to the way roles and responsibilities on the electricity system are currently distributed, and the differences in transparency created by traditional boundaries, means conflicts across different parties and actors are becoming more likely in the future.

Product 5 will review network co-ordination and co-optimisation issues that could arise when both the DNO and the ESO are seeking to procure flexibility from the same FSP and/or managing issues in the same parts of the network or, in some cases, where localised actions may affect the ability to balance the overall system on a national basis. In 2021, the product scope covers the delivery of the key principles to support the development of the Primacy Rules in 2022, providing networks, stakeholders, market platform designers etc. with clarity and transparency on the approach and likely impacts across the system(s).

As set out in the 2021 PID, work on this product commenced in June. Whilst there are no outputs yet to feed into this consultation the product team are keen to use the opportunity to seek stakeholder input as follows:

Q11 – Are there any particular projects/reports we should be considering as part of our initial review of work carried out on Primacy to date? This could include international examples.

2021 Product 6 (ON21 WS1A P6): Support non-DSO services (such as peer-to-peer) and align/utilise their proliferation for grid resilience.

Product 6 has been working with a range of current innovation projects to establish how distribution network companies can best support non-DSO (Distribution System Operation) services; and to allow the value of commercially sterilised capacity to be discovered through market-based mechanisms.

Working with Origami and a wide range of industry stakeholders we have undertaken a number of market simulations over four workshops. These simulations have considered how DNOs could facilitate the sharing and/or trading of capacity, and the trading of curtailment risk.

A joint ENA and Origami report has been published and trials are due to start later this year as part of Project LEO (Local Energy Oxfordshire); led by Scottish and Southern Electricity Networks. Further work to be taken forward is considerable and may depend on the stakeholder level of interest in Capacity Trading/Sharing. The activities include:

• System Study Requirements and Sensitivity Factors to provide clarity on how these can provide an early indication of the network acceptability of a capacity trade and determine how they can support market growth without adversely affecting appetite trading and sharing of capacity.

• the need for standardised approaches including a standardised peer to peer trade agreement; market operation and rules; and data availability.

• Determine the stakeholder appetite and level of interest in trading and/or sharing capacity and the potential value.

• Live trials are planned for 2021, which will depend on collaboration. Discussions are underway to identify overlaps with the SSEN project “Transition” and their upcoming trials. This includes a gap analysis between the WS1A P6 workshop outcomes and the existing Transition trial scope to identify collaboration opportunities (and any overlaps and conflicts).
Q12 – Is the trading and / or sharing of capacity or curtailment risk of interest? What do you see as the major barriers currently?

2021 Product 7 (ON21 WS1A P7): Implementation of common Baseline Methodologies for measuring delivery of Flexibility Services

Key output of the product team’s work in 2020 was the implementation of common baseline methodologies for adoption by all DNOs. In 2021, this product will seek to further consult with stakeholders to refine and agree baseline approaches which will be adopted by DNOs for their operation of flexibility products.

Following the product timeline outlined in the 2021 PID, a webinar was conducted with relevant stakeholders to share baselines recommendation outcomes of WS1A 2020 P7 work. Through this engagement and survey a broad agreement on recommended baselines was ascertained. An interim report on the outcomes of stakeholder engagement including a roadmap for the delivery and development of aligned distribution constraint baseline was published. A verification tool specification was also provided, and this will shape the development of the baselining tool.

Next steps:

- Appoint a provider to build the baseline verification tool: the product team are in discussion with TEF project (TRANSITION, Electricity Flexibility and Forecasting Systems (EFFS), FUSION) to explore the potential of using key outputs of the TEF project for Open Networks Product 7. The TEF project is an ongoing group of network innovation trials, funded through Ofgem’s Network Innovation Competition, led by Scottish and Southern Electricity Networks and Electricity Northwest (TRANSITION,); Western Power Distribution (EFFS); SP Energy Networks (FUSION)
- Build and test tool with historical data sets. Undertake analysis to ensure results meet baseline objectives.

Q13 – Does the roadmap outlined for the delivery and development of aligned distribution constraint baseline methodologies (as detailed in the Product 7 interim report) meet the needs of the market?

2021 Product 8 (ON21 WS1A P8): Apportioning Curtailment Risk for Flexible Connections (ANM)

Flexible Connections, facilitated though ANM schemes, allow expedited access to the network at a vastly reduced cost in exchange for that access being curtailed by the DNO without compensation and potentially unlimited. This product has reviewed the curtailment risks and options for spreading the risks more equitably across assets with Flexible Connection (ANM), DNOs and existing customers.

Ofgem’s Access and Forward-Looking Charges SCR is considering changes to the distribution connection boundary, potentially reducing customer exposure to deep reinforcement costs and the need for Flexible Connections (ANM). To avoid the risk of undertaking work subsequently invalidated, we are focusing on low regret activity that, where possible, does not rely on Ofgem’s decision.

A status quo Risk Matrix, covering all parties, was created and shared with a Flexible Connection (ANM) Stakeholder Focus Group. Subsequent work to identify options to apportion curtailment risk better has, with stakeholder input, focused on investigating curtailment caps and collars for Flexible Connections (ANM). This work is captured in the paper on apportioning FC(ANM) exit risk. It describes the potential use and impacts of curtailment caps and collars. It also considers the considerable challenges, including regulatory, to deliver such fundamental changes.
Q14 – We are exploring the use of curtailment caps and collars to apportion curtailment risk better; do you agree with our high-level impact assessment on the various parties?

Q15 – Do you support the use of caps and collars as described in the report?

Q16 – Do you have any views on the alternatives presented? E.g. Peer-to-peer flexibility trading; an incentive scheme similar to that currently used for Customer interruption/ Customer minutes lost (CI / CML)?

2021 Product 9 (ON21 WS1A P9): Strategy for improving the availability of Curtailment Information for Flexible Connections (ANM)

This product is focused on the availability of improved curtailment information to both enhance opportunities in Flexible Services, including revenue stacking for assets with Flexible Connections (ANM), and to create additional services for Flexibility Service Providers (FSP) who could, potentially, mitigate the need to curtail Flexible Connections with flexibility products.

Ofgem’s Access and Forward-looking Charging SCR is considering changes to the distribution connection boundary, potentially reducing customer exposure to deep reinforcement costs and the need for Flexible Connections (ANM). To avoid the risk of undertaking work subsequently invalidated, we are focusing on low regret activity that, where possible, does not rely on Ofgem’s decision.

In March 2021 the provision of constraint information by each DNO was updated and published.

This was followed in April by a two-staged approach to capturing stakeholder needs for improving curtailment information. We circulated a Stakeholder Curtailment Information Questionnaire and also held a Flexible Connection (ANM) Stakeholder Focus Group Workshop to playback the common themes arising from the questionnaire, identify priorities and capture any further requirements. The combined approach of a Questionnaire and a Focus Group Workshop enabled the product team to explore the detailed stakeholder requirements. Some common themes arose, such as greater transparency of assumptions and models plus granularity and frequency of network data, that need to be addressed to aid stakeholders in assessing curtailment risk. A set of principles have been identified for each step of the Flexible Connection (ANM) process from pre-application through to the offer stage and then improving information once operational. In May 2021 a report on the Curtailment Information Principles and Key Requirements was published.

The DNOs will now conduct a gap analysis between the curtailment information currently provided by the networks and the stakeholder needs identified. There will also be further targeted workshops with members of the Flexible Connection (ANM) Stakeholder Focus Group to discuss access to additional background information and assumptions etc. for both third party curtailment modelling and individual asset developers/operators.

Q17 – We have used a Flexible Connection (ANM) Stakeholder Focus Group to help us identify the specific curtailment information needs and priorities for current and potential users of Flexible Connections; do you agree with this approach?

Q18 – Do the curtailment information requirements we have identified as a priority, with input from the Stakeholder Focus Group, meet your needs? If not, what additional requirements are there?

Q19 – In addition to improving curtailment data provision, Product 9 has also considered the role of third-party curtailment information providers where more sensitivities can be provided specific to customer
assets. Would you consider using a third party for more curtailment tailored information and if so, should we explore this option further or leave it to the market?

Residential Flexibility

This consultation is targeted at all flexibility providers, including industrial, commercial, residential and small-scale business customers. 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. We see the potential for large amounts of flexibility to be provided by residential and small-scale business customers in the future.

In late 2020 the decision was taken to pause the Code Modifications (SECMP0046 and DCP371) to allow an alternative working group to be established and investigate possible solutions to provide a “last resort” capability to DNOs in specific use cases where they require a temporary measure to afford the time to procure flexibility or reinforce a network, ensuring they are appropriate for delivery and protecting customers’ interests. The group is focused on ensuring any solutions would deliver a positive outcome for DNOs, customers and suppliers/flexibility providers, and has been meeting every three weeks since February to progress this work.

In our continued effort towards enabling residential flexibility, we want to hear about potential barriers and opportunities for providing flexibility to networks. It is important that the solutions are inclusive ensuring no one is left behind or disadvantaged by being less engaged; and those opportunities exist for all customer groups wishing to participate in flexibility and in particular vulnerable customers.

Q20 – Do you have any ideas on how we might better engage and encourage participation of residential flexibility in flexibility service provision and identify any barriers that might currently exist along with potential solutions?
Flexibility Consultation 2021- Summary

Broader questions for WS1A

<table>
<thead>
<tr>
<th>ON WS1A</th>
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<tbody>
<tr>
<td>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.)</td>
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<tr>
<td>Q2 – Are you aware of the Flex figures being published each year on ENA Website? How does understanding of GB’s growing Flexibility market size help you and how are you using this information?</td>
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<tr>
<td>Q3 – Open Networks members are committed to implementing outputs and driving the benefits of recommendations. Which product or area would swift implementation of the outputs be most desirable?</td>
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</table>

Relevant Publications:
- Flexibility figures - Full GB wide update 2021

Product specific questions

<table>
<thead>
<tr>
<th>ON21 WS1A P1 Enhancements to the Common Evaluation Methodology (CEM) and CEM Tool used to evaluate flexibility and traditional intervention options.</th>
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<tr>
<td>Q4 – What factors do you believe has led to the lack of response to the call to join the User Forum for the CEM this year?</td>
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<tr>
<td>Q5 – We are keen to understand whether our model of open governance for the User Forum was a factor in the lack of response, do you believe that a User Forum approach would be useful to consider for progressing key products next year or are there alternative approaches that we should consider?</td>
</tr>
</tbody>
</table>

Relevant Publications:
- Open Networks CEM and Tool User Forum: Terms of Reference - Published in May 2021
### ON21 WS1A P2 Alignment of Flexibility Services procurement processes and timescales between DNO and ESO

**Q6** – Do you agree with the P2 team’s findings regarding the alignment of DNO and ESO timescales? Please provide your rationale and any supporting evidence that we can use to inform our approach, particularly in short – medium timescales (now – start of ED2)?

**Q7** – How could we further evolve alignment of procurement processes in future?

**Q8** – Do you agree that the proposed improvements to visibility of requirements will be of direct benefit to your sector of the industry, if so, please share your rationale and how you would utilise this information? Do you have thoughts on how we can improve visibility further?

**Relevant Publications:**
- Review of DNO-ESO Flexibility Procurement Process Timescales

### ON21 WS1A P3 Principles to review Flexible Connection (Active Network Management) contracts.

**Q9** – Do you agree that there is an exit route, using the current G99 approach, for existing FC(ANM) customers who want access to firm(er) connections? If not, what do you see as the barriers?

**Q10** – Do you agree with the findings of the Product 3 report and if so, which area(s) are of most interest going forward?

**Relevant Publications:**
- Report on stakeholder feedback and recommendations - Published in May 2021

### ON21 WS1A P5 Defining ‘Primacy Rules’ for the ESO and the DNOs to manage service conflicts.

**Q11** – Are there any particular projects/reports we should be considering as part of our initial review of work carried out on Primacy to date? This could include international examples.

**Relevant Publications:** n/a
### ON21 WS1A P6 Support non-DSO services (such as peer-to-peer) and align/utilise their proliferation for grid resilience.

| Q12 – Is the trading and/or sharing of capacity or curtailment risk of interest? What do you see as the major barriers currently? |
| Relevant Publications: |
| Paper summarising market simulation findings - Published in Apr 2021 |

### ON21 WS1A P7 Implementation of common Baseline Methodologies for measuring delivery of Flexibility Services

| Q13 – Does the roadmap outlined for the delivery and development of aligned distribution constraint baseline methodologies (as detailed in the Product 7 interim report) meet the needs of the market? |
| Relevant Publications: |
| Verification tool specification - Published in Jun 2021 |
| Interim report on the outcomes of stakeholder engagement including a final baseline design, governance strategy proposal, and a draft implementation plan - Published in Jul 2021 |

### ON21 WS1A P8 Apportioning Curtailment Risk for Flexible Connections (ANM)

| Q14 – We are exploring the use of curtailment caps and collars to apportion curtailment risk better; do you agree with our high-level impact assessment on the various parties? |
| Q15 – Do you support the use of caps and collars as described in the report? |
| Q16 – Do you have any views on the alternatives presented? E.g. Peer-to-peer flexibility trading; an incentive scheme similar to that currently used for Customer interruption/ Customer minutes lost (CI/CML)? |
| Relevant Publications: |
| Paper detailing at a high level the future options for apportioning FC(ANM) curtailment risk - Published in Jul 2021 |
### ON21 WS1A P9 Strategy for improving the availability of Curtailment Information for Flexible Connections (ANM)

Q17 – We have used a Flexible Connection (ANM) Stakeholder Focus Group to help us identify the specific curtailment information needs and priorities for current and potential users of Flexible Connections; do you agree with this approach?

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**Relevant Publications:**
- Revised ONP "DNO Provision of Constraint Information" report - Published Mar 2021
- Report that captures the principles underpinning improvements, stakeholders’ key requirements - Published May 2021

### Residential Flexibility

Q20 – Do you have any ideas on how we might better engage and encourage participation of residential flexibility in flexibility service provision and identify any barriers that might currently exist along with potential solutions?

**Relevant Publications:** n/a
Appendix 1 - Product Development Plan from PID

P4 – Common Contract
- V1.2 Evolution paper
- V2 for DNO ESO alignment on general terms
- V2 public consultation
- Update V2

P5 – Primacy Rules for service conflicts
- Review available work
- Develop principles & primacy rules

P6 – Non-DSO services
- Market simulations for shared access & trading capacity
- Trials for shared access & trading capacity
- Develop BAU approach to sharing/trading capacity
- Monitor other industry trials

P7 – Baselining
- Refine and finalise
- Develop and implement tool

P3 (ANM) – Principles to review legacy ANM contracts
- Stakeholder engagement
- Develop principles for review
- Agree regulatory approach

P8 (ANM) – Apportioning curtailment risk
- Identify status-quo & stakeholder engagement
- Options & impact analysis
- Seek regulatory input & Implementation Plan

P9 (ANM) – Curtailment Info
- Review existing data. Agree approach and identify stakeholder needs
- Gap analysis and agree priorities for delivery with stakeholders
- Develop prioritised plan
- Start implementation

Public consultation on all work up to Jul 21 followed by public consultation on P4 Common Contract in Aug 21