Open Networks Project
Work Plan Consultation Webinar

February 4th 2021
Thank you for joining this Open Networks Project Webinar on the 2021 Workplan consultation.

• This webinar will commence at 10:03.

• If you are unable to play the audio through your device, you can **dial in by calling +44 20 3855 5885 and using access code 353 758 276** All microphones have been set to mute to avoid background noise. Please ask questions or make comments **via the chat function** throughout the meeting. We will pause for a Q&A in the middle & end.

• We will address as many of these as possible during the presentation and will make the recording available online.

• If you would like to receive information about the Open Networks Project or have any feedback you would like to submit, please get in touch with us at opennetworks@energynetworks.org.
<table>
<thead>
<tr>
<th></th>
<th>Topic</th>
<th>Duration</th>
<th>Presenter</th>
<th>Time</th>
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<tr>
<td>1</td>
<td>Introduction &amp; Background</td>
<td>10m</td>
<td>Farina Farrier (ENA)</td>
<td>10:00 – 10:10</td>
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<td></td>
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<td>Jason Brogden (ENA)</td>
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<td>2</td>
<td>WS3 DSO Transition</td>
<td>10m</td>
<td>Steve Atkins (SSEN)</td>
<td>10:10 – 10:20</td>
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<td>3</td>
<td>WS4 Whole Energy System</td>
<td>10m</td>
<td>Mark Herring (NG ESO)</td>
<td>10:20 – 10:30</td>
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<td>4</td>
<td>WS1A Flexibility Services</td>
<td>10m</td>
<td>Sotiris Georgiopoulos (UKPN)</td>
<td>10:30 – 10:40</td>
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<td>5</td>
<td>Q&amp;A</td>
<td>10m</td>
<td>Farina Farrier (ENA)</td>
<td>10:40 – 10:40</td>
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<td>6</td>
<td>WS1B Whole Electricity Systems &amp; TD Coordination</td>
<td>10m</td>
<td>Ian Povey (ENWL)</td>
<td>10:50 – 11:00</td>
</tr>
<tr>
<td>7</td>
<td>WS2 Customer Connections and Information Provision</td>
<td>10m</td>
<td>Jim Cardwell (NPG)</td>
<td>11:00 – 11:10</td>
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<tr>
<td>8</td>
<td>2020 Year End Review &amp; Stakeholder Engagement</td>
<td>10m</td>
<td>Emily Jones (ENA)</td>
<td>11:10 – 11:20</td>
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<td>Dan Clelland (ENA)</td>
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<tr>
<td>9</td>
<td>Q&amp;A and Wrap-up</td>
<td>10m</td>
<td>Farina Farrier (ENA)</td>
<td>11:20 – 11:30</td>
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</table>
Energy Networks Association (ENA) represents the ‘wires and pipes’ transmission and distribution network operators for gas and electricity in the UK and Ireland.

ENAs overriding goals are to promote the UK and Ireland energy networks ensuring our networks are the safest, most reliable, most efficient and sustainable in the world.
Open Networks – Delivering a Smart Grid

ENA’s The Open Networks Project is a major industry initiative that is powering Britain forward to Net Zero by enabling homes, businesses, and communities to provide clean energy back to the networks. Open Networks is delivering a smart grid by opening up new markets, and building an all inclusive energy system.

The Open Networks Project will help customers connect and break down barriers, enabling customers to access multiple markets to provide services; all the while reducing cost for consumers through more cost effective planning.

Late last year Government launched the Prime Minister’s Ten Point Plan, the Climate Change Committee’s Sixth Carbon Budget and the Energy White Paper. The publication of these plans means we now have clear policy pathways for UK decarbonisation, and the Project is now better positioned than ever before to tackle the important and ambitious target of achieving Net Zero by 2050.

We are taking a ‘learn-by-doing’ approach; we are using innovation funding to trial and test aspects of the various future electricity system options to drive the key changes needed to transition to a Net Zero emissions smart grid.

A short animation on the Project can be found at: https://youtu.be/te_d34zldJ8
2021 Areas of Work

Longer term focus.

Taking ownership of the overarching DSO Implementation Plan.

Progressing short to medium term developments for DSO

Overseeing stakeholder engagement and comms across the project.

WS3 DSO Transition

WS1A Flexibility Services

WS1B Whole Electricity System Planning & T-D Data Exchange

WS2 Customer Information Provision & Connections

WS4 Whole Energy Systems

WS5 Comms & Stakeholder Engagement
Key Priorities

Flexibility remains the largest area of work with highest priority

As well as defining our body of work, we have identified key dependencies, particularly RIIO2

With more clarity from Government through the 10 point plan and the Energy White Paper, Open Networks will continue to enable delivery of Net Zero by:

a) opening local flexibility markets to demand response, renewable energy and new low-carbon technology and removing barriers to participation
b) providing opportunities for these flexible resources to connect to our networks faster
c) opening data to allow these flexible resources to identify the best locations to invest
d) delivering efficiencies between the network companies to plan and operate secure efficient networks
Flexibility Roadmap

We have published a Flexibility Roadmap which links our development work to our Flexibility Commitments and Next Steps for Implementation as well as a consolidated list of key stakeholder issues.

Providing a forward looking view of work beyond 2021 and signposts key industry developments that are feeding into our work.
ENA launched a 6-week consultation on its 2021 workplan, open from Jan 18th – March 1st

We are keen to hear views from the industry on this ambitious programme of work and have asked for any comments in any format to make it easy to respond.

More information on this consultation including the full PID can be found on our website
Workstreams & Products
WS3 DSO Transition - The journey so far

2017
- Foundations for “Future Worlds”
  - DSO Definition & Functions
  - Principle of neutral market facilitation
  - Commercial Principles paper 2017

2018
- Detailed SGAM modelling

2019
- Impact Assessment & Pathways
  - Independent assessment set out a pathway in the short term on a model of stronger coordination between DNOs and ESO and allows for future changes to roles and responsibilities to deliver the most effective mode.

2020 & 2021
- DSO Implementation Plan
  - Modelled 5 different Future Worlds with different attribution of roles and responsibilities for DSO Functions.
DSO Transition

Setting out a clear plan giving visibility of actions as well as key decisions that are required to progress the development and implementation of the least regrets pathway to Distribution System Operation.

The DSO Implementation Plan is an interactive tool that shows all the actions that networks companies are undertaking to progress the transition.
WS3 2021 – Key milestones

Distribution System Operation Implementation Plan

Conflicts of Interest & Unintended Consequences – Maintain published version & change log

- Publish first iteration
- Publish second iteration
- Publish findings of independent audit of DSO Roadmap

Making accessibility improvements & enabling data extraction
Increasing granularity and publishing company level data for more transparency
Independent audit to review and challenge activity
**Whole Energy System**
Delivering benefits for customers and consumers by realising more cost-effective network investment and operation across the electricity and gas networks.

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
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<tbody>
<tr>
<td>Whole System CBA (P1)</td>
<td>Further development of the CBA methodologies defined in 2020.</td>
</tr>
<tr>
<td>Investment Planning (P4)</td>
<td>Building on 2020 optioneering proposals for implementation.</td>
</tr>
<tr>
<td>Coordinated Gathering of Regional Data (P3)</td>
<td>Driving short term network led and long term local authority led approaches.</td>
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WS4 Timeline

P1 – Whole Systems CBA
- Incorporate model into CAM consultation
- V1.1 of model and methodology to reflect S/H feedback
- V2 of model and methodology and governance

P3 – Coordinated Gathering of Regional Data
- Develop recommendations for local authority led approach
- Develop detailed processes to support network led approach
- Review implementation & refine process

P4 – Investment Planning
- Finalise proposal for whole system optioneering & develop detailed processes, templates to support implementation
- Implementation by network companies

The voice of the networks
Developing transparency and standardised approaches across DNOs flexibility procurement, delivering consistency with the ESO.
Enabling new markets and platforms for flexibility (e.g. peer-to-peer trading).
Reducing reliance on Flexible Connection ANM contracts

* Indicates key products prioritised for resourcing and delivery

Facilitation of Non-DSO Services such as peer to peer trading, and sharing of capacity (P6)*

Principles to review legacy ANM Contracts (P3)*
Apportioning curtailment risk (P8)*
Curtailment information (P9)*

Procurement Process (P2)
- Enhancing Common Evaluation Methodology and Tool (P1)*
- Common contract for flexibility services (P4)*
- Baselining flexibility services (P7)
- Primacy Rules for Service Conflicts (P5)
### WS1A - High Priority Products

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
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<tbody>
<tr>
<td>Common Evaluation Methodology (P1)</td>
<td>Enhancing the areas of optionality and carbon assessment.</td>
</tr>
<tr>
<td>Common contract for flexibility services (P4)</td>
<td>Building on standard agreement to incorporate liability, indemnity and insurance.</td>
</tr>
<tr>
<td>Principles to review legacy ANM Contracts (P3)</td>
<td>Reduce reliance on ANM by offering improved choices.</td>
</tr>
<tr>
<td>Non-DSO Services (P6)</td>
<td>Facilitation of Non-DSO Services such as peer to peer trading, and sharing of capacity</td>
</tr>
<tr>
<td>Apportioning curtailment risk (P8)</td>
<td>Options for how the risk of curtailment might be more equitably spread across ANM connections</td>
</tr>
<tr>
<td>Curtailment information (P9)</td>
<td>Improve information to enable participation in flexibility markets</td>
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## WS1A - Other Products

<table>
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<tr>
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<tbody>
<tr>
<td>Procurement Process (P2)</td>
<td>Further alignment of DNO and ESO procurement timescales (including consideration of the Capacity Market).</td>
</tr>
<tr>
<td>Primacy Rules for Service Conflicts (P5)</td>
<td>Helping economic and efficient management</td>
</tr>
<tr>
<td>Baselining flexibility services (P7)</td>
<td>Implementation of a common baseline for all DNOs</td>
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## WS1A Timeline

<table>
<thead>
<tr>
<th>P1 – CEM</th>
<th>Monitor other industry trials</th>
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<tbody>
<tr>
<td>P2 – Procurement Process</td>
<td>Create CEM Forum &amp; engage consultancy</td>
</tr>
<tr>
<td>P3 (ANM) – Principles to review legacy ANM contracts</td>
<td>Review existing data. Agree approach and identify stakeholder needs</td>
</tr>
<tr>
<td>P4 – Common Contract</td>
<td>Alignment of ESO DNO timelines for procurement</td>
</tr>
<tr>
<td>P5 – Primacy Rules for service conflicts</td>
<td>Develop principles &amp; primacy rules</td>
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<tr>
<td>P6 – Non-DSO services</td>
<td>Trials for shared access &amp; trading capacity</td>
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<tr>
<td>P7 – Baselining</td>
<td>Develop and implement tool</td>
</tr>
<tr>
<td>P8 (ANM) – Apportioning curtailment risk</td>
<td>Risk assessment</td>
</tr>
<tr>
<td>P9 (ANM) – Curtailment info</td>
<td>Options &amp; impact analysis</td>
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### Key Points:
- **P1 – CEM**: Monitor other industry trials.
- **P2 – Procurement Process**: Create CEM Forum & engage consultancy.
- **P4 – Common Contract**: Alignment of ESO DNO timelines for procurement.
- **P5 – Primacy Rules for service conflicts**: Develop principles & primacy rules.
- **P6 – Non-DSO services**: Trials for shared access & trading capacity.
- **P7 – Baselining**: Develop and implement tool.
- **P8 (ANM) – Apportioning curtailment risk**: Risk assessment.
- **P9 (ANM) – Curtailment info**: Review existing data. Agree approach and identify stakeholder needs.

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**Public consultation on all work up to Jul 21 followed by public consultation on P4 Common Contract in Aug 21**
Whole Electricity System Planning & T-D Data Exchange

Optimising existing processes and **data exchange** across T & D boundary.

Improving **visibility of DER** for operational planning.

Improved **data provision** for non-network stakeholders.
### WS1B - Product details

<table>
<thead>
<tr>
<th>Product</th>
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<tbody>
<tr>
<td>FES &amp; Central scenario (P2)</td>
<td>Improving the quality of DFES and FES publications for stakeholders and further alignment across various forecasting processes.</td>
</tr>
<tr>
<td>Network Development Process (P5)</td>
<td>Building on capacity signposting and developing the end to end process for Network Development Plans.</td>
</tr>
<tr>
<td>Operational DER visibility and monitoring (P6)</td>
<td>Defining needs cases, CBA framework, and performing CBA to inform policy on DG visibility.</td>
</tr>
<tr>
<td>Operational Data Sharing (P7)</td>
<td>Supporting and informing an upcoming license condition to improve operational data sharing.</td>
</tr>
<tr>
<td>Review of Technology Business Management (P8)</td>
<td>Scoping activity to review current systems for capturing IT/OT systems and establish feasibility of adopting TBM.</td>
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In addition to the above, WS1B will monitor industry developments on outputs delivered through P1 Investment Planning, P3 Real Time Data Exchange and P4 Data Exchange in Planning Timescales.
## WS2 - Focus areas & Products

**Customer Information Provision & Connections**
Delivering improvements to customer connections process and identifying further opportunities for consistency.

<table>
<thead>
<tr>
<th>2021 Products</th>
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<tr>
<td>Embedded Capacity Register (P1)</td>
<td>Incorporate improvements, include T and ESO elements and consider inclusion of &lt;1MW</td>
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<tr>
<td>Queue Management (P2)</td>
<td>Implementation and review for further improvements.</td>
</tr>
<tr>
<td>Interactivity (P3)</td>
<td>Developing process from 2020 to embed the recommendations of CMP328.</td>
</tr>
<tr>
<td>Connection agreement review (P4)</td>
<td>Reviewing current DNO connection agreements in light of more recent smart grid developments.</td>
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<tr>
<td>User Commitment Improvements (P5)</td>
<td>Review of process and, if merited, recommend actions to modify the methodology.</td>
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*Ongoing implementation of Queue Management including proposals published in 2020.*
## WS2 - Product details

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WS2 Timeline

P1 – Embedded Capacity Register
- ECR Template Improvements
  - Inclusion TO Information & proposal for inclusion of ESO Balancing Services
  - Update ECR to include ESO Balancing Services
  - Finalise proposals for inclusion of <1MW DER
  - Implement
  - Consider implementation of central register

P2 – Queue Management
- Support implementation
- Review how DNOs are promoting flexibility and proposal for any next steps
- Take forward further work as needed

P3 – Interactivity
- Review findings of CMP328 and update 2020 user guide

P4 – Connection Agreement Review
- Review current arrangements and develop proposal for further work
- Take forward further work as required

P5 – User Commitment Improvements
- Review ongoing experience and recommend further actions

The voice of the networks
2021 Objectives – use a combination of public affairs, press, social media & direct engagement to raise stakeholder awareness of:

- How and where the Project is driving the key changes and innovation needed to transition to deliver Net Zero emissions
- The role network operators are playing in laying the foundations for the UK’s smart electricity grid
- Key focuses of the Project this year. These include: industry leading work on Flexibility Services, continued work delivering the DSO transition, improving the customer connections process, and delivering Whole Energy Systems Efficiencies
- Opportunities to engage with the Project, our development work and our output

This workstream will continue to:

- Proactively support stakeholder engagement for key Open Networks Output
- Provide comms input and review into key publications (e.g. consultations, EoY report)
- Engage with parliamentarians & policy makers
- Generate media and stakeholder interest
- Generate Press Releases and interviews
- Communicate via Social Media
- Generate research material and/or communications material (e.g. animations) to support key messaging
- Participate in event speaking opportunities
- Conduct ENA and Member profile raising
2021 Q1 key activity

- Recently launched the 2020 End of Year Review alongside the Workplan consultation and PID. We will continue to promote the consultation in the lead up to the March deadline.
- Publication of v1.2 of the common contract
- Domestic flexibility event
- First Community Energy Forum

- Will issue Q1 newsletter with activity overview in March
- Will be running a range of webinars for different products – information for these will be available via ENA’s Events page
How to Respond

For more information about the Open Networks project, please don’t hesitate to get in touch with us at opennetworks@energynetworks.org

Or

visit our website

https://www.energynetworks.org/creating-tomorrows-networks/open-networks

The consultation closes on 1st March 2021 and feedback on the Open Networks 2021 Work Plan is welcomed from all stakeholders.

If you would like to respond to the consultation, please submit your response to opennetworks@energynetworks.org.

ENA will publish a response mid-May 2021.
Useful Links

- Project Scope for 2021
- Work plan consultation
- Flexibility Roadmap
- DSO Implementation Plan
- Stakeholder events & supporting material
- 2020 End of Year report

We welcome feedback and your input
How to get involved

Advisory Group
Public Consultations
Public Events
Mailing List

Click here to join our mailing list
In Dec 2018, DNOs made the commitment to openly test the market to compare relevant grid reinforcement and market flexibility solutions for all new projects of significant value.

- This is key in reducing the costs of new infrastructure investment and lays the foundations for a new, cleaner, more flexible network.
- Offers households, businesses and communities the ability to offer their flexible services to the networks.
- Taking a technology agnostic approach.

[Link](http://www.energynetworks.org/assets/files/ENA%20Fle x%20Committment.pdf)

In Jun 2019, Electricity Networks committed to six steps for making these emerging flexibility markets work in practice:

1. Champion a level playing field
2. Visibility and accessibility
3. Conduct procurement in an open and transparent manner
4. Provide clarity on the dispatch of services
5. Provide regular, consistent and transparent reporting
6. Work together towards whole systems outcomes.

[Link](http://www.energynetworks.org/assets/files/ENA%20Flexibility%20Commitment% 20Our%20Six%20Steps%20for%20Delivering%20Flexibility%20Services.pdf)
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