


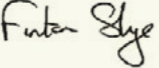



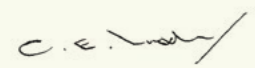

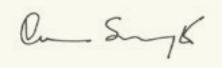

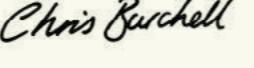

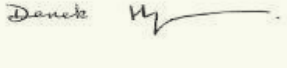

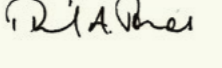



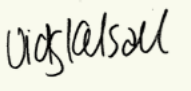

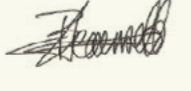


# Open Networks 2023 Launch Document



# Contributing Partners

 <p><b>Ross Easton</b> Interim Chief Executive Energy Networks Association</p> 	 <p><b>Fintan Slye</b> Executive Director GB Electricity System Operator</p> 	 <p><b>Paddy Hayes</b> Managing Director ESB Networks</p> 
 <p><b>Clive Linsdell</b> Executive Chairman BUUK Infrastructure</p> 	 <p><b>Ian Smyth</b> Chief Executive Officer Electricity North West</p> 	 <p><b>Chris Burchell</b> Managing Director Scottish &amp; Southern Electricity Networks</p> 
 <p><b>Derek Hynes</b> Managing Director Northern Ireland Electricity Networks</p> 	 <p><b>Phil Jones</b> Chief Executive Northern Powergrid</p> 	 <p><b>Phil Swift</b> President National Grid Electricity Distribution</p> 
 <p><b>Vicky Kelsall</b> Chief Executive Officer SP Energy Networks</p> 	 <p><b>Basil Scarsella</b> Chief Executive Officer UK Power Networks</p> 	

# Introduction

Energy Networks Association (ENA) represents the owners and operators of the transmission and/or distribution of energy in the UK and Ireland. ENA leads a number of cross-industry initiatives on behalf of its members to address key challenges across the energy sector and to facilitate low carbon flexibility.



The Open Networks programme is one of these strategic initiatives that is leading the transition to a smart and flexible energy system and getting networks ready for Net Zero.

Launched in 2017, Open Networks is laying the foundations for a smart, flexible energy system in Great Britain and informing future developments in Northern Ireland and Ireland.

Over the years, the programme has made substantial progress and contributions to the sector, including informing the transition to Distribution System Operation and helping to establish the largest local flexibility market in Europe.

## Purpose of this document

This launch document sets out to present the evolution of ENA's Open Networks programme, as well as the ambitious outcomes we're looking to deliver in 2023 and beyond. These ambitions are driven by our stakeholders, BEIS and Ofgem's Smart Systems and Flexibility plan (2021) and the need for networks to evolve in the race to Net Zero. Our plan aims to allow flexibility providers to easily engage with the market while having transparency of network planning and decision-making, and make energy networks more coordinated and aligned.

More details on programme delivery milestones, timelines and governance can be found in our detailed work plan.

Visit the [Open Networks](https://opennetworks.org) website to learn more about the programme and get involved. You can also reach out to us at [opennetworks@energynetworks.org](mailto:opennetworks@energynetworks.org)



# Voice of our stakeholders

Stakeholder engagement and collaboration with the wider industry have always been at the heart of the Open Networks programme. In 2022, we took steps to open our governance further by introducing the Open Networks Challenge Group to shape the direction of the programme, its priorities, and the outcomes it delivers by providing a more formal challenge function on behalf of the wider industry.

- **Challenge group** - The Challenge Group was set up through an open call for participation in 2021 and membership is reviewed on an ongoing basis to ensure appropriate representation across the sector. The group consists of 20 industry experts chaired by an independent Chair who also has a seat at the Open Networks Steering Group. The latest [list of members](#) and [Terms of Reference](#) can be found on the ENA website.
- **Public consultation(s)** - In 2022, Open Networks held two public consultations. The annual flexibility consultation sought stakeholder input on flexibility related developments to date, as set out in the [2022 Programme Initiation Document](#). The [detailed response to the consultation](#) was considered in the development of the work within individual working groups as well as fed into the evolution of Open Networks in 2023. We also held a consultation seeking focused input on the latest developments of the Common Evaluation Methodology. A summary of the feedback and ENA's response can be found on the [ENA website](#).
- **Focus groups** - We facilitated stakeholder focus groups including both academia and industry representatives at key development stages for stakeholders to feed into our technical working groups. Based on stakeholder feedback, these forums were deemed to be less resource intensive than the previously proposed User Forums that required stakeholders to join the technical working group and undertake development work alongside the working group members.
- **Feedback from critical friends** - We engaged with a group of academics and industry experts to discuss key technical challenges and recommendations for specific topics.
- **Webinars and Insights Forums** - Our quarterly Insights Forums share insights on Open Networks more broadly. They give stakeholders the opportunity to stay up to date with the latest developments and provide input into the programme. These forums were attended by more than 150 participants across 13 countries in 2022. You can sign up to join the forum via our [online form](#).
- **Public events and workshops** - We host a series of public events, webinars, panel events and round-tables throughout the year to complement our consultations or specific areas of work. All of these help steer the development of the Open Networks programme.

## We are listening

Leading up to the 2023 scoping activities, Open Networks has facilitated several discussions to inform the future direction, role, and remit of the programme.

The [Open Networks' Challenge Group's 2022 report](#) and [complete responses to the Flexibility consultation](#) (and technical working groups' responses) capture some of the key feedback we received.

Through our various engagements noted above, we have endeavoured to identify the "hits" (areas Open Networks delivered value and impact) and "misses" (areas where the programme needs to improve to ensure the smooth evolution of distributed flexibility), to the benefit of customers, flexibility providers and networks alike.



### Hits:

- Strong support for the programme and its outputs. Stakeholders were unanimously in support of ENA's efforts to deliver the programme, bringing together all the network companies and the ESO.
- Commitment to the DSO model and establishing a world-leading local flexibility market as BaU, with 3.7 GW tendered local flexibility in 2021/2022, common information reporting and sharing.
- Strong support for the commitment of ENA's members to deliver the programme. Over 200 subject matter experts from ENA's member organisations worked on the programme in 2022.
- Transparency of our stakeholder engagement efforts.

### Misses:

- Whilst most acknowledge the importance of Open Networks, we have received feedback from stakeholders that the delivery of key outcomes could be faster.
- Focus on areas that lead to tangible results and prioritise efforts on "big ticket items" that flexibility service providers see as barriers to entering the market.
- There has also been some concern around the speed and consistency of implementation of the outputs by the participating ENA members, resulting in limited improvement to customer experience for non-network stakeholders such as flexibility providers.
- Deliver a consistent user experience for customers engaging with flexible markets in terms of products, processes and contracts. Our stakeholders note that in order to deliver these simple-sounding outcomes, network companies will need to have some difficult conversations.
- Reinstating a sense of urgency in delivering outcomes. Our stakeholders noted that the programme needs to move beyond developing recommendations and strive to implement those recommendations swiftly and consistently across network companies.
- Improve engagement in feedback loops with industry innovation projects, sharing learnings in both directions.



**We are highly supportive of much of this year's flexibility outputs and as such there is little that we feel we need to draw to the ENA's attention."**

- E-On

**The development work undertaken by Open Networks is vital to build liquidity, improve access and standardise products in the flexibility market."**

- Electralink

**We commend the progress that has been made by the Open Networks programme thus far to try to streamline flexibility products between DNOs, however there are still significant discrepancies between product parameters which is particularly problematic."**

- Octopus Energy

**Open Networks will need to accelerate the development of standardised processes and products across pre-qualification, procurement, and dispatch to build engagement and confidence in flexibility markets."**

- Citizens Advice

**The Challenge Group would like to see Open Networks tackling some of these simple sounding but hard to deliver changes."**

- Open Networks Challenge Group

### Stakeholders expect the following outcomes from Open Networks in 2023::

- Make it easy for flexibility service providers to enter the DSO market
- Improve standardisation of flexibility products and processes
- Improve operational co-ordination and remove barriers to dispatching flexibility
- Improve visibility and transparency of processes and decision making
- Ensure the programme is in sync with wider industry and innovation activities

# Need for Open Networks to evolve

Over the past five years, we've worked with key stakeholders to build real momentum in the transition to a smart, flexible, Net Zero energy system. But it is clear that Open Networks must evolve in order to continue to build on our success and drive the programme forward to deliver Net Zero networks.

## Key Challenges acknowledged by everyone

- A need for an increase in the uptake of flexibility services. As noted in BEIS and Ofgem's Smart Systems and Flexibility plan (2021) and by all DNOs (and ESO) in their business plan submissions, flexibility is a key piece in the UK's ambitions for Net Zero.
- Competitive UK regulatory landscape, where individual DNOs are competing in some areas to be first and/or differentiate themselves from the rest.
- Different priorities across organisations, geographical/regional needs, appetite for risk and availability of resources to commit to Open Networks.
- Need for agility to respond and adapt to developing policies and technological innovation.

Consistency across network companies is a challenge but essential – this is where Open Networks can deliver impact.

## Setting Open Networks up for success

**Greater focus:** The scope of the Distribution System Operation transition is huge. However, given the available resource, doing too many things can come at the expense of doing a few important things really well. Open Networks will focus on those areas most important to stakeholders and most suited to cross-network collaboration (this will mean de-prioritising some existing workstreams).

**Outputs vs outcomes:** Open Networks has produced more than 350 deliverables to date, but these have not always led to real-world outcomes and benefits to non-network stakeholders. In 2023, Open Networks defines clear outcomes we want to achieve, which will then measure our success at the end of the year. Workstreams will have more freedom in how they deliver the desired outcomes and adapt to challenges.

**Ensuring the right representation:** In many cases, the benefits of Open Networks rely on recommendations being adopted into business as usual. Consistent implementation of recommendations across DNOs is likely to require material changes; this will require senior-level commitment within the companies, BEIS and Ofgem, where changes are required to network companies' systems or procedures. We will ensure that the network representatives engaged in Open Networks are empowered to make agreements.

**Agility:** There are several key industry and policy developments that are imminent (e.g. Review of Electricity Market Arrangements, Significant Code Review, Future of Local Energy Institutions and Governance). Greater focus on key areas allows Open Networks to decrease the number of active work areas and allows for sufficient capacity to remain agile and accommodate changes in our programme of work throughout the year as necessary.

**Learnings from relevant innovation projects:** Network companies undertake several innovation trials through network innovation allowance, competition and Strategic Innovation Funds. Several trials undertaken by DNOs and ESO are exploring key aspects of future flexibility markets. Open Networks will amend its governance to allow sharing of learnings from relevant innovation projects and receive updates on relevant DSO/ESO initiatives to embody the "learn by doing approach".

**Making information more accessible:** Open Networks will ensure that our past and future deliverables are accessible to our existing stakeholders (ENA members, Ofgem, BEIS, Challenge Group and Insights Forum members) and seek to reach a wider industry audience who may not necessarily be aware of our work areas (e.g., new flexibility providers joining the market, asset developers, academics etc).

# Open Networks 2023 Delivering Outcomes

In 2023, Open Networks is looking to refocus our activities and deliver tangible consistent changes to industry practices across participating ENA members, rather than stopping at recommendations for changes.

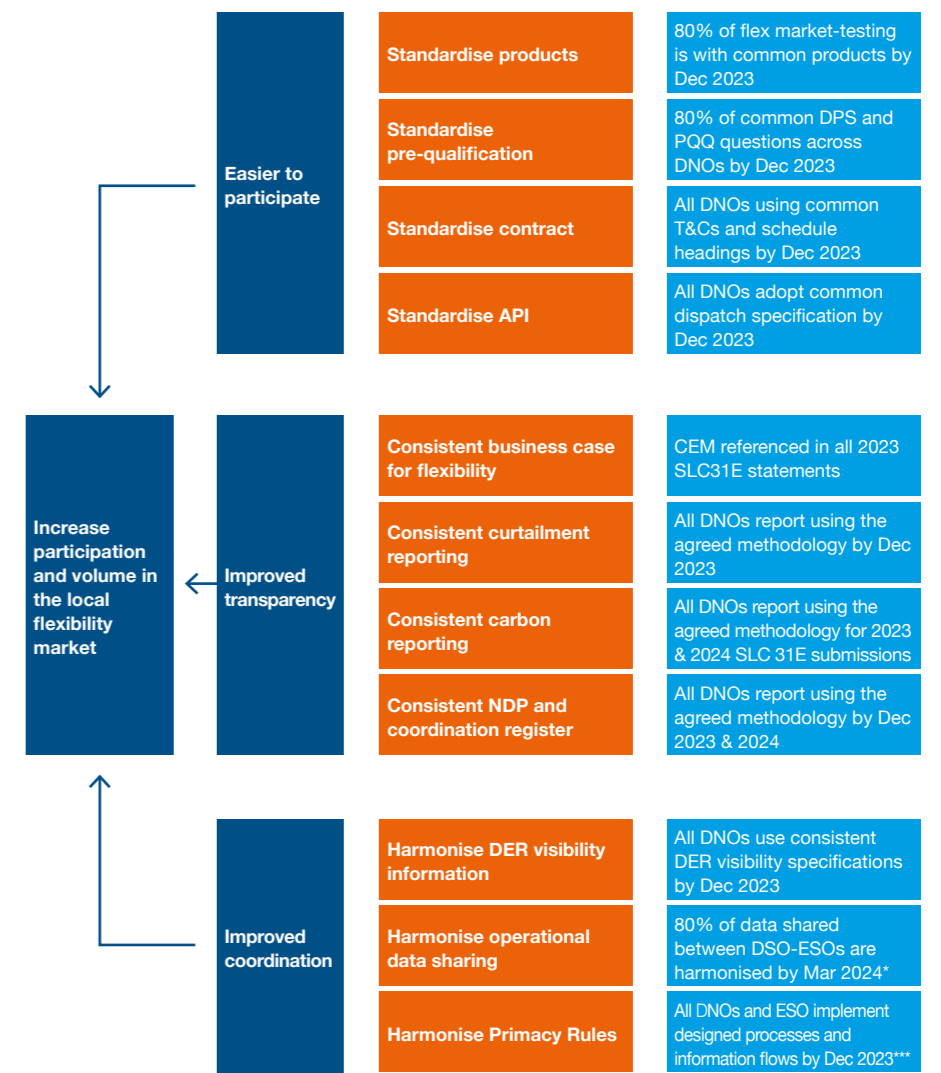
Going forward, Open Networks will have a stronger focus on DSO and flexibility markets. In 2023, Open Networks will focus on increasing participation and volume in the local flexibility market. In line with actions from the Smart system Flexibility plan (2021), we will focus on:

1. Making it easier for flexibility service providers to participate in the flexibility market by standardising products, processes and contracts,
2. Improving operational coordination between networks and companies to remove barriers to the delivery of flexibility services,
3. Improve the transparency of processes, reporting and decision-making.

These objectives will be delivered by setting out specific and measurable results with clear timelines for consistent implementation.

As part of the Flexibility Commitment, Britain's DNOs and Open Networks remain committed to six key steps as we transition to a more efficient, smarter and low-carbon energy system fit for Britain's future. These are:

- Champion a level playing field
- Ensure visibility and accessibility
- Conduct procurement in an open and transparent manner
- Provide clarity on the dispatch of services
- Provide regular, consistent and transparent reporting
- Work together towards whole energy system outcomes



**Key**  
■ Objective  
■ Activity (directional)  
■ Key result (specific and measurable)\*\*

\*To be reviewed and confirmed following detailed scoping of this activity  
 \*\*Key result applies to GB DNOs only  
 \*\*\*For use cases in Iteration 1 and 2 as identified in the 2021 [implementation plan](#)

# Delivery structure for Open Networks 2023

The programme objectives will be delivered by consolidating the programme into three new workstreams aligned with the DSO roles defined by Ofgem;

- **Planning and Network Development**
- **Network Operation**
- **Market Development**

A reduced number of active technical working groups are scoped with specific measurable outcomes, with timelines for consistent implementation. Milestones and deliverables of the individual technical working groups can be found in the [detailed work plan](#).

The decreased number of active work areas allows for sufficient capacity to remain agile and accommodate changes in our programme of work throughout the year as necessary.

Later this year, we'll be looking to include work on the alignment of the flexibility services settlement processes.

Open Networks will also continue to monitor and provide an annual update on some of the wider strategic pieces of work such as the Conflict of Interest and Unintended Consequences Register, GB flexibility figures and the Strategic Roadmap for Flexibility.

### Areas of work that were deprioritised in 2023:

- **Ensuring interoperability.** This concept needs to be defined further. For now, we will focus on common APIs for flexibility providers.
- **Improvements to the Common Evaluation Methodology.** Our current focus is deploying version 2 of the tool and gathering learnings to develop the next version.
- **Implicit flexibility products.** It is too early to standardise these products. We will monitor relevant innovation projects to trigger this work if and when relevant.
- **Secondary capacity trading.** It is too early to standardise this. For now, we will monitor relevant innovation projects.

### Considerations for network companies to implement:

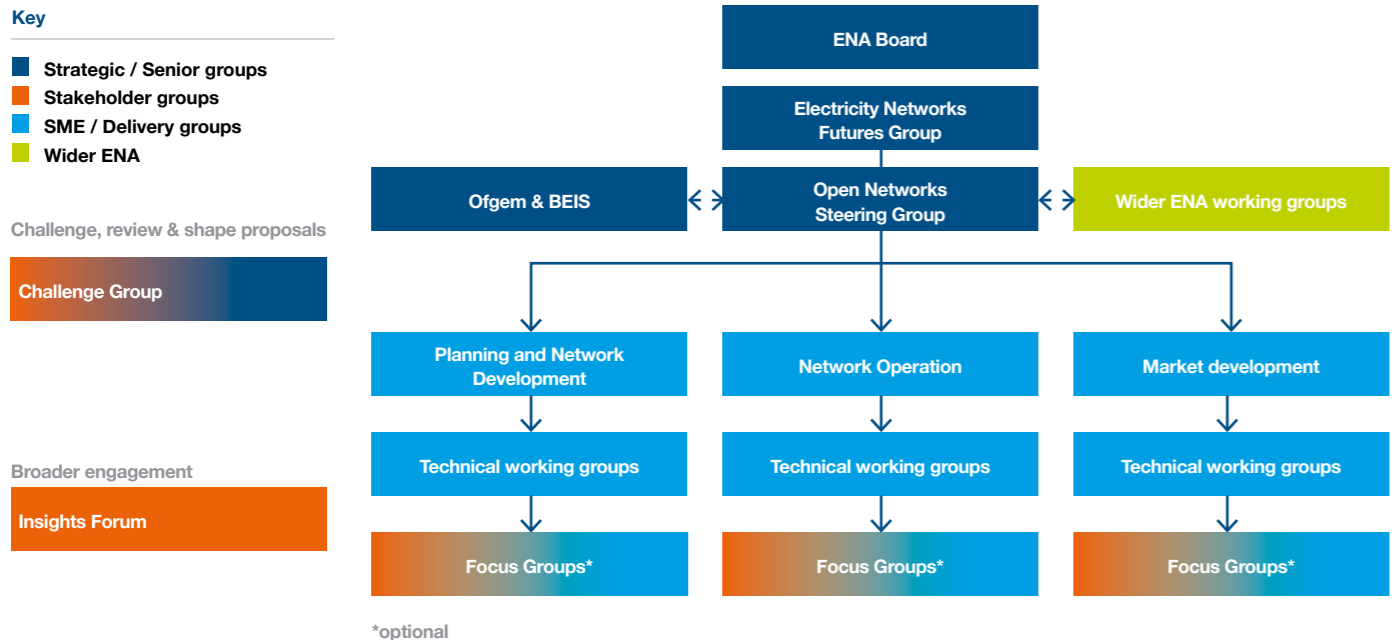
All ENA members are invested in delivering these outcomes, however, it is important to note some of the factors that network companies need to consider on route to implementation.

- **Impact on resources:** There is likely to be reasonable if not significant impact on the DNOs (and ESO) in the adoption of proposals. The required resource to roll out the final actions would involve several teams beyond Open Networks including (but not limited to) flexibility services, procurement, and legal teams in each network company.
- **Timing:** It is likely that a period of 2-3 months will be needed for some DNOs to fully adopt the new proposals post review, release (and consultation). Some legacy contracts and processes will remain in place for several months before being phased out. For the ESO adoption could be more complex with additional consultations and regulatory review periods imposed.
- **Cost:** This is DNO/ESO dependent based on their existing processes, systems and needs. In some instances, DNOs could need discussions with Ofgem once an approach is agreed.

	Technical working group	Description		Impact/Customer benefit
<b>Planning and Network Development</b>	Carbon Reporting	Support Ofgem's/BEIS' initiative to achieve common methodologies for carbon reporting and monitoring across DNOs by the 2023 reporting and refine them further in 2024 reporting cycle.		Customers will have visibility of local flexibility market carbon intensity across GB networks, reported through a consistent and transparent methodology.
	Network Development Plan and Co-ordination Register	Review and update the Network Development Plan (NDP) by 2023 and the Whole Electricity System Coordination Register Form of Statement as required by 2024.		Stakeholders are informed of major developments over a one to ten year time-frame with sufficient detail to aid their planning and forecasting activities.
	DER Information	Implement plans for receiving consistent information from Distributed Energy Resources (DER) with appropriate governance by April 2024 (and/or trigger code modifications as appropriate).		Requirements for new DER connections will be streamlined and network visibility will be improved through the consistent information flow from DER to DNOs.
<b>Network Operation</b>	Primacy Rules for Service Conflicts	Define and implement 'Primacy Rules', including processes and information flows for the ESO and the DNOs to manage service conflicts. (Iteration 1 in April 2023 and iteration 2 in October 2023).		Clear and consistent rules to manage conflicts arising within and across flexibility markets will help service providers improve their DSO flexibility offerings, whilst ensuring secure operation of the networks.
	Dispatch Systems Interoperability	Development API standards for dispatch system interoperability across ESO and DSO for the summer 2024 flexibility tender.		DSO flexibility market platforms will provide an optimal end-to-end experience, saving flexibility service providers from needing to develop multiple interfaces.
	Operational Data Sharing	Facilitating sharing real-time operational and forecasting data between ESO and DNO (and non-network stakeholders).		Consistency of data sharing between DSO and ESO ensures more robust forecasts and processes that will directly contribute to improving flexibility market operation.
<b>Market Development</b>	Standard Agreement	Improve existing Standard Agreement for procuring flexibility services across DSO and ESO by aligning the contract schedules for flexibility tenders beyond December 2023.		Flexibility providers will have minimal legal costs in engaging with the market through standard agreements across all DSO and relevant ESO flexibility services, moving towards a framework arrangement.
	Procurement Process	Alignment of sign-up and pre-qualification processes for flexibility service procurement across DNOs by December 2023.		Simplified and standardised pre-qualification process will ensure easy sign-up to DSO flexibility markets and a consistent user experience across the country.
	Flexibility Products	Align DSO flexibility product definitions. At least 80% of tendered flexibility should be tendered through common products by 2024.		Flexibility providers are able to identify which services they're best placed to offer, based on a limited number of standardised DSO flexibility products.
<b>Monitoring and keeping established work areas on track</b>	Common Evaluation Methodology	Governance of Common Evaluation Methodology (CEM) (and tool) used to evaluate flexibility and traditional intervention options.		Flexibility providers can have confidence in fair rewards and methodologies used for decision making across networks are robust and transparent.
	ANM Curtailment Information	Provide consistent and accessible curtailment information for ANM-enabled flexible connections pre-SCR (Significant Code Review).		Customers under flexible connections have accurate and consistent curtailment information allowing them to forecast their business plans and improve participation in flexibility markets.
	Baselining Methodologies and Tool	Monitor the roll out of the Baselining tool developed in 2021.		This tool allows flexibility providers to better understand their offerings and provides transparency of DNO methodology.

# Governance of Open Networks in 2023

In 2022, we introduced open governance to work closely with our stakeholders and become even more transparent. In 2023, we have further updated our governance to include stakeholders at every stage of work. Engaging with our stakeholders and sharing learnings with industry innovation projects will be one of our key priorities in 2023.



Under the ENA board, **Electricity Networks Futures Group (ENFG)** will hold the funding for the Open Networks programme but delegate authority for the spend of that budget and the management and delivery of the programme to the Open Networks Steering Group.

The **Open Networks Steering Group** is the key group with the responsibility to direct the delivery of the programme to time, cost, and quality. The Open Networks Steering Group will be a small group with a single representative from each operator organisation including BEIS, and the ENA Open Networks Team. Additionally, the Steering Group will also be attended by the Open Networks Challenge Group Chair to provide the link to the Challenge Group.

Chaired by an independent Chair, the 20 members of the **Open Networks Challenge**

**Group** shape the direction of the programme, its priorities and the outcomes that it delivers by providing a more formal challenge function on behalf of the wider industry.

The programme team liaise with **Ofgem and BEIS** on an ongoing basis to discuss progress and address any issues. BEIS provide input into the Open Networks Steering Group, specific workstreams and technical working groups. Ofgem provide steer on the programme in periodic bilateral meetings, and consult on technical work areas where this is of particular value.

The **Insights Forum** (previously the Dissemination Forum) along with wider engagement activities will continue for stakeholders wishing to engage more broadly with the programme.

**Technical working groups** will be formed of subject matter experts (SME) from ENA member organisations to develop each area of work.

The technical working group lead will have accountability for delivery of their working group outputs in line with the scope and timescales set out in the detailed work plan.

For key working groups, Open Networks will facilitate **focus groups** consisting of key industry stakeholders at relevant development stages for stakeholders to feed into the development of the subject area. These targeted focus groups will be facilitated by the technical working group leads. In addition, technical working groups will invite relevant industry innovation projects to share their learnings through these focus groups.

# Open Networks and wider ENA

Open Networks will support the delivery of the themes identified in the Energy Networks Innovation strategy.

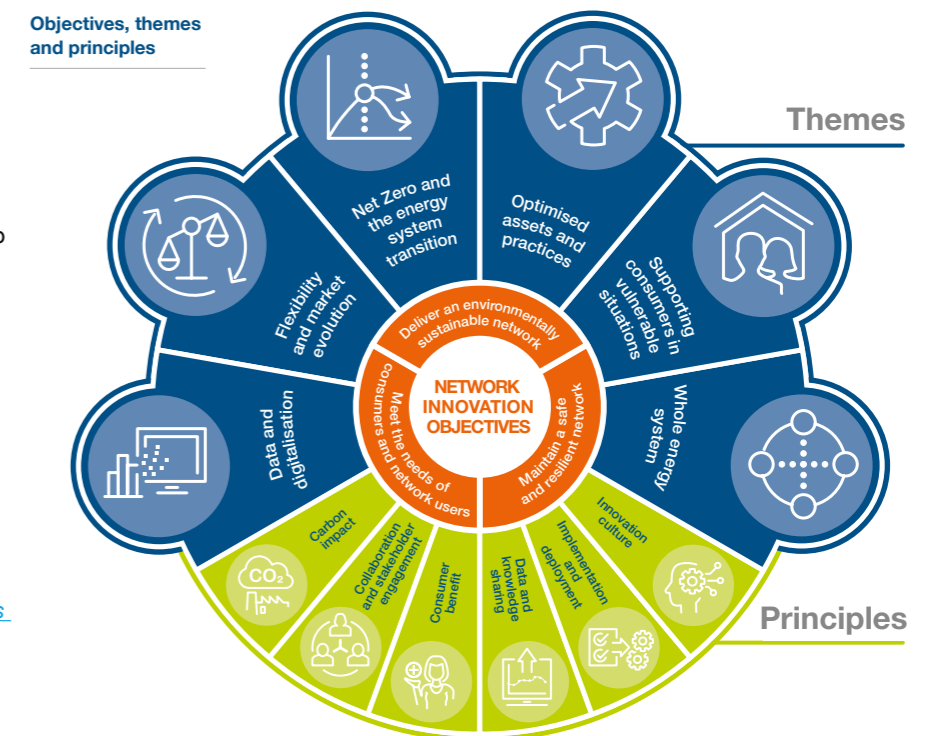
The work of Open Networks is closely linked with wider ENA directorates and programmes, including

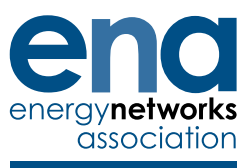
- Data and Digitalisation Steering Group (DDSG)
- Strategic Connections Group (SCG)
- Low Carbon Technology Steering Group (LCT SG)
- Whole System Strategy Board (WSSB)
- Markets and Regulations directorate

### Important links

- [Detailed work plan](#)
- [Challenge Group 2022 report](#)
- [Summary and response to Open Networks flexibility consultation](#)
- [List of Challenge Group members](#)
- [Link to join the Insights Forum](#)

Visit our website to find out more about [Open Networks](#). You can also reach out to us at [opennetworks@energynetworks.org](mailto:opennetworks@energynetworks.org)





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