

# Open Networks project

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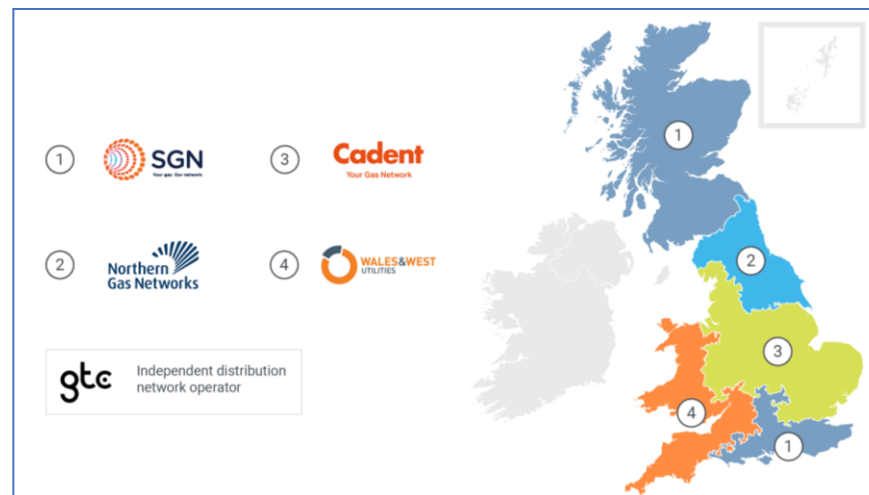
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# Introduction to Energy Networks Association

## The voice of the networks

- 29 million electricity customers
- 21.5 million gas customers
- 180,000 miles of gas network
- 519,304 miles of electricity network
- £60bn invested 2015-23



# Energy Landscape

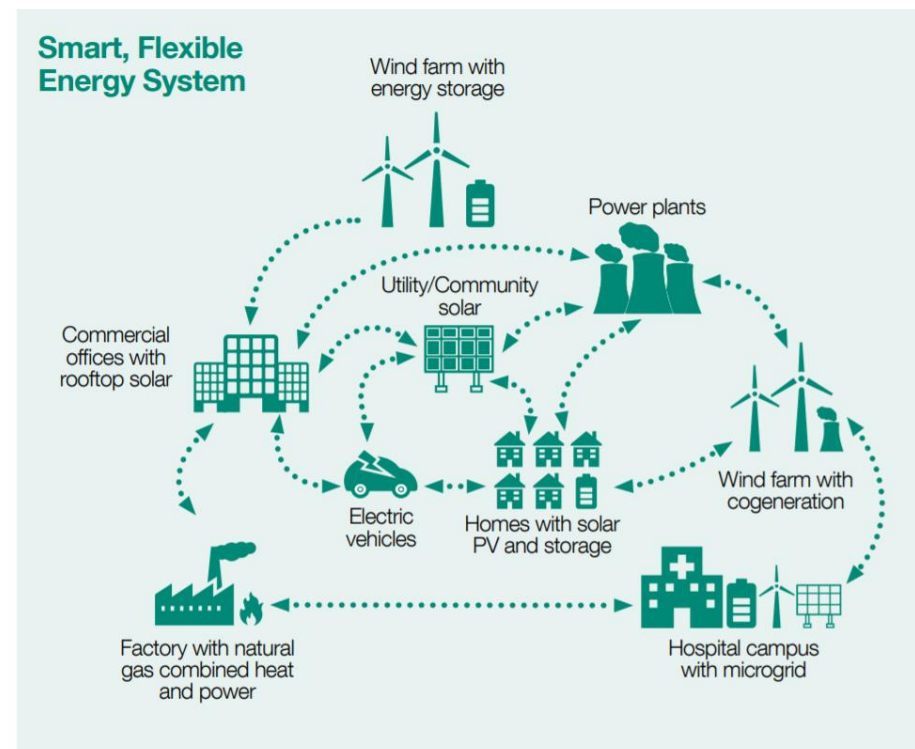
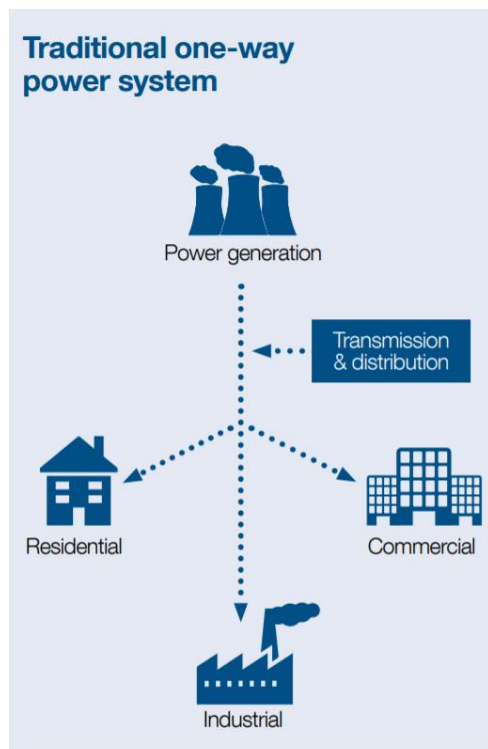
The UK has world-leading climate change targets that require a fundamental change across the energy system.



## Net Zero

78% reduction by 2035

A smart and flexible energy system is essential to hitting the UK's net zero climate goal while keeping energy bills affordable for everyone.



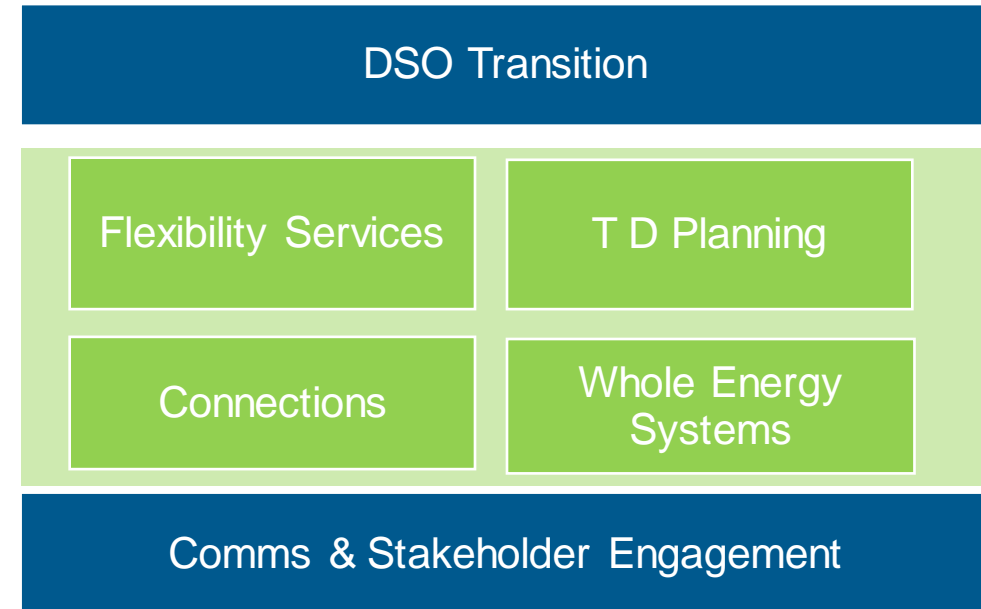
# ENA's Open Networks project

Open Networks is a major industry initiative that is leading the transition to a smart and flexible energy system that will enable Net Zero.

Open Networks is delivering a Smart Grid by:

- ✓ [Opening local flexibility markets](#) to demand response and renewable energy
- ✓ Helping customers [connect faster](#)
- ✓ [Opening data](#) to enable customers identify best locations to invest
- ✓ [Delivering efficiencies](#) between network companies to operate secure and efficient networks

## Areas of focus



## Open Networks Approach



## Flexibility Commitment

Britain's Networks have made a "Flexibility Commitment"; using cost-efficient flexibility to relieve network congestion

- ✓ Champion a level playing field
- ✓ 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 systems outcomes



# Open Networks project

Dr. Avinash Aithal

Technical lead



# Flexibility in Great Britain

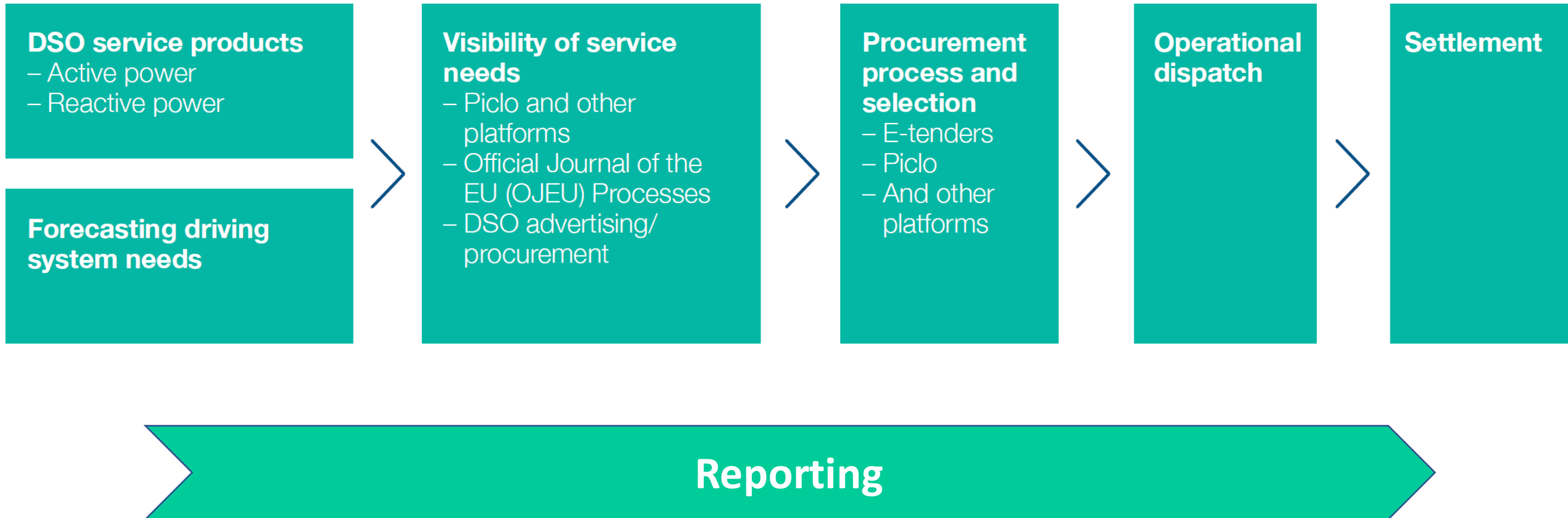
The UK has world-leading local flexibility markets with around **3GW** of flexibility available for tender this year.

DSO Flexibility Tenders		Sustain (MW)	Secure (MW)	Dynamic (MW)	Restore (MW)	Reactive Power (MVar) (if applicable)
		Peak Capacity (MW)	Peak Capacity (MW)	Peak Capacity (MW)	Peak Capacity (MW)	Peak Capacity (MVar)
Industry Total	Contracted for 2018	0	24	34	59	0
Industry Total	Contracted for 2019	0	10	121	125	0
Industry Total	Contracted for 2020	2	105	556	503	0
Industry Total	Tendered for 2020	28	481	771	779	7
Industry Total	Contracted for 2021	2	206	599	542	0
Industry Total	Tendered for 2021	41	827	1088	958	9

## 4 Real Power Products defined by Open Networks

- Sustain: Scheduled Constraint Management
- Secure: Pre-Fault Constraint Management
- Dynamic: Post-Fault Constraint Management
- Restore: Restoration

## Streamlining the process





# Consultation Products

## Flexible Services

- Enhancements to the **Common Evaluation Methodology (CEM)** and the CEM Tool used to evaluate flexibility and traditional intervention options.
- **Alignment of Flexibility Services procurement processes** and timescales between DNO and ESO
- **Defining 'Primacy Rules'** for the ESO and the DNOs to manage service conflicts.
- Implementation of **common Baseline Methodologies** for measuring delivery of Flexibility Services

## Flexible Connections (ANM)

- **Principles to review Flexible Connection** (Active Network Management) contracts.
- **Apportioning Curtailment Risk** for Flexible Connections (ANM enabled)
- Strategy for improving the **availability of Curtailment Information** for Flexible Connections

## Non-DSO services

Support non-DSO services (such as peer-to-peer) and align/utilise their proliferation for grid resilience.

## Open Networks Flexibility Consultation

ENA's Open Networks has launched a [wide-reaching consultation on flexibility](#), open for eight weeks (until Friday 24 September). The project team are welcoming responses from the energy industry and beyond on how the project can further drive standardisation in local energy markets right across the country.

Further to this, we are holding a separate [consultation on the next version of the standard contract](#) for flexibility services, which seeks to further drive standardisation, consistency and transparency.

You can find the [Flexibility Consultation Overview document](#), [Standard Agreement Consultation Overview document](#) and our [2021 GB wide Flexibility figures](#) on the ENA website.