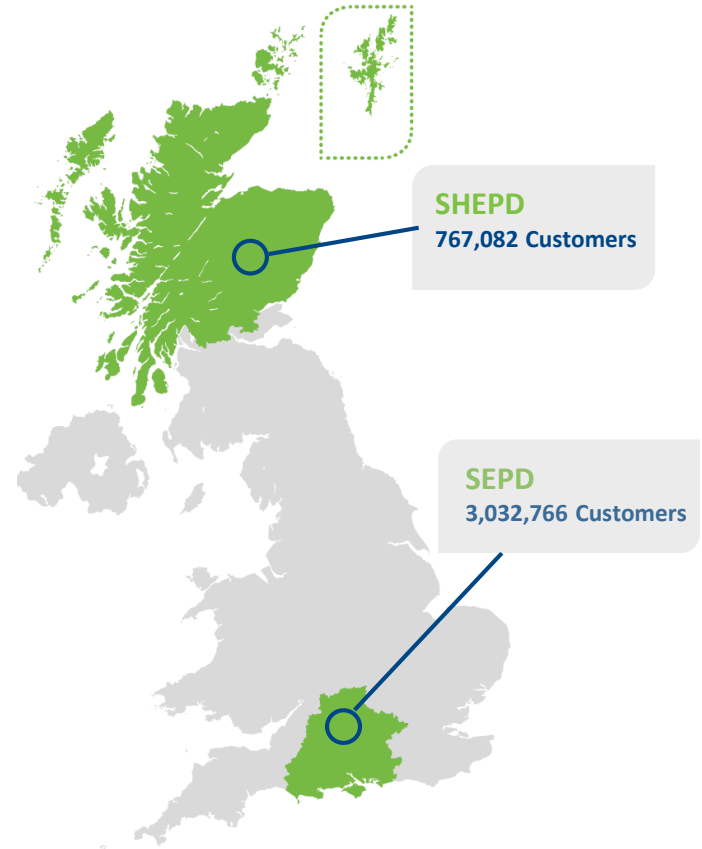
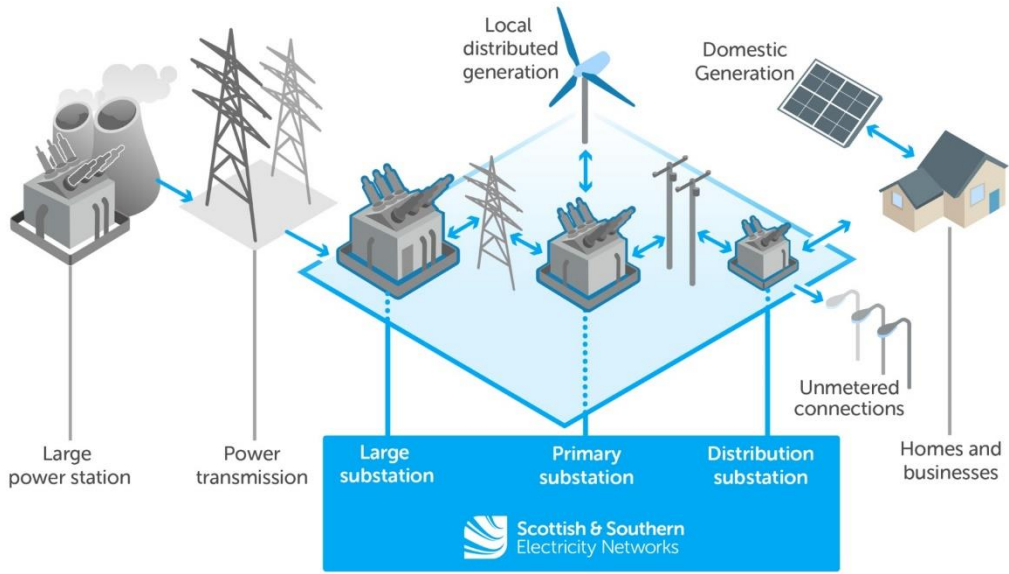


Cathy Falconer  
Commercial Manager

Connecting to the Network

# Who we are and what we do



# The ICE Plan Process

## Our Annual Submission:

- Published end May
- Looking Back on previous year's progress
- Looking Forward plans and commitments
- For 2018/19 we will also produced a 16 page summary report for customers

## Submission shows:-

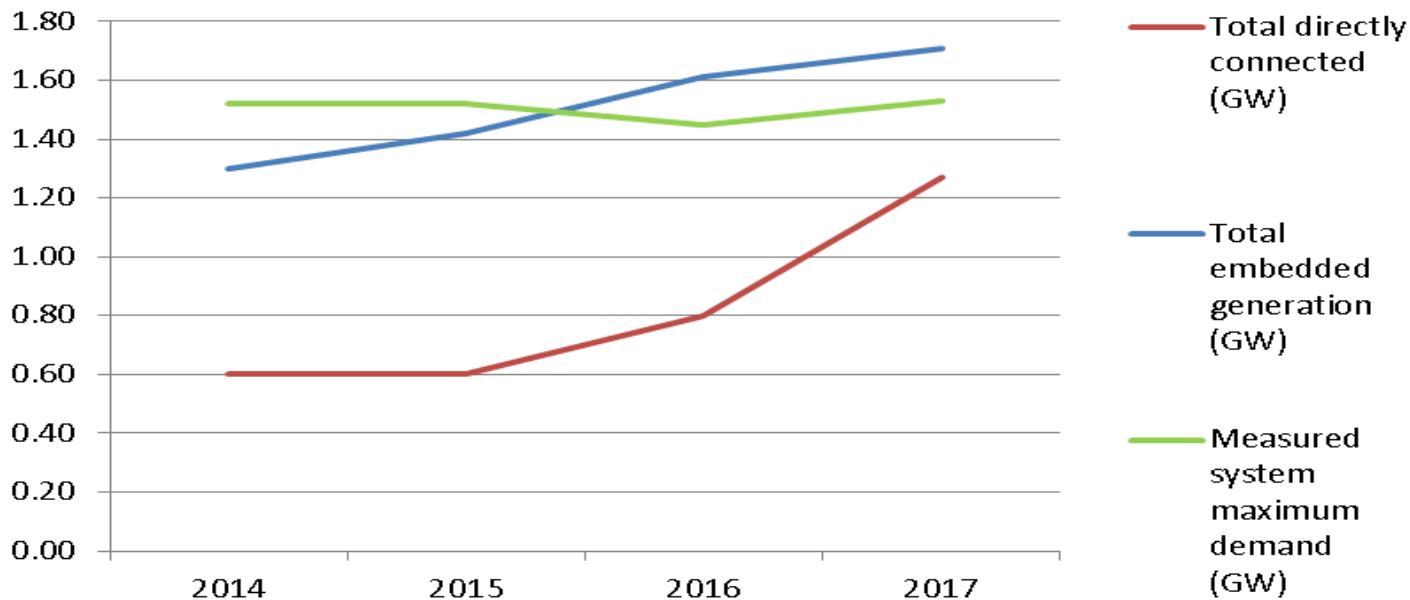
- Evidence of how each commitment was identified
- Clear and measurable key performance indicators
- A target time of completion

Our workplan must add real value for our customers

<https://www.ssen.co.uk/ICE/>



## Renewable Energy Connected



# Generation Availability Map

## Capacity:

- Size of Assets – Grid and Primary
- Available Headroom
- Planned Reinforcement
- Dedicated Contact

## Contracted Position:-

- Connected Projects
- Contracted Projects
- Quoted Projects
- Opportunity for Consortia

<https://www.ssen.co.uk/GenerationAvailabilityMap/?mapareaid=2>



**Connection requests**

- Connections home
- For small projects
- For developers
- Moving your connection
- Generation connections
- Unmetered connections
- Competition in connections

**Connections information**

- Quick estimate
- You have a choice
- Our plans and commitments
- Electrical contractor information
- Disconnecting electricity supplies
- Long term development statements
- Generation availability map
- Network capacity map
- Events
- MPAN

**Connections help**

- Connections help home
- Useful documents
- FAQs
- Ask a question
- Connection design
- Guaranteed stand
- Connections enga
- Community

**POWER CUT?**



Emergencies - North of Scotland

Are we your distributor?

Sign In

Register

Please log into your account

Email Address \*

Password \*

Sign In

[Forgotten your details?](#)

Need some help?

Write to us at:

Connections and Engineering  
Walton Park  
Walton Road  
Cosham  
PO6 1UJ

Email us at: [connections@sse.com](mailto:connections@sse.com)

Call us on:

England 0800 048 3516  
Scotland 0800 048 3515

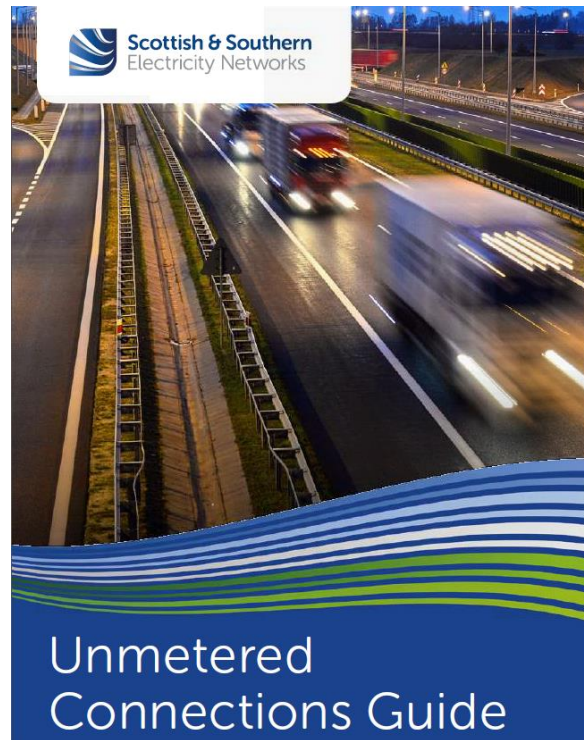
Download the  
You Have a Choice  
factsheet





# Unmetered Connections – Website and Guide

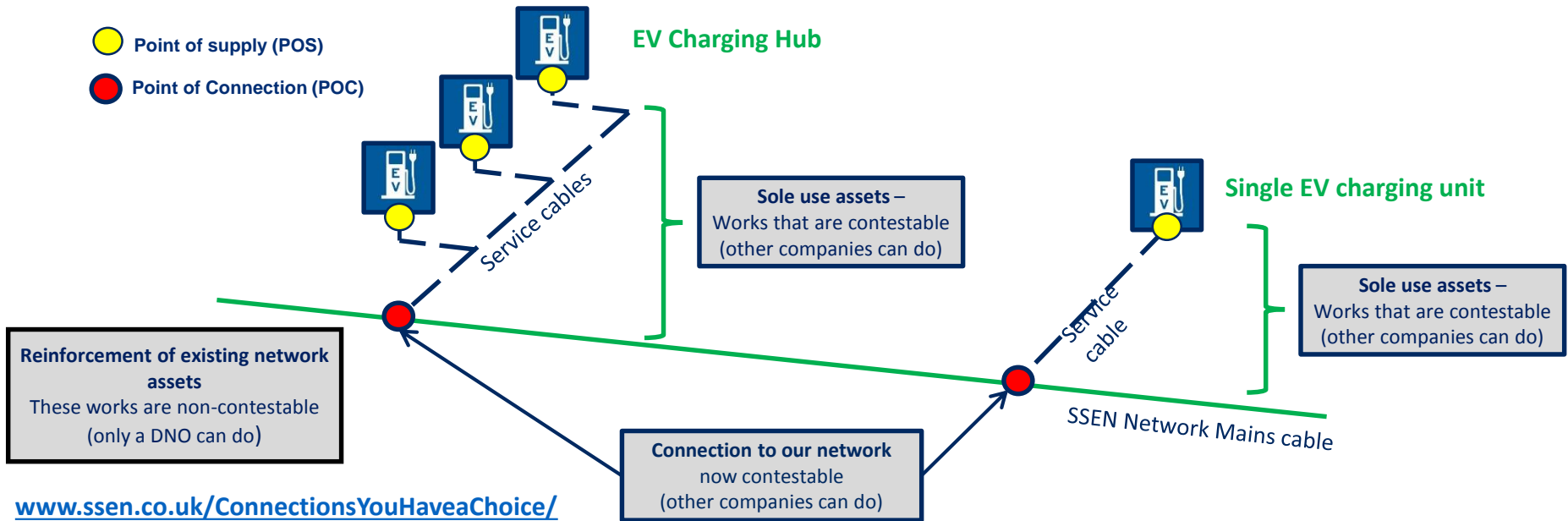
- **Unmetered Customers**
  - What is needed in your application
  - Inventory Management
  - Unmetered Meter Point Administration Number (MPAN)
  - Supply restoration
- **Competition in Connections – Alternative Providers**
  - What is needed in your application
  - Completing the works on behalf of Unmetered Customers
- **Contact Details**
- <https://www.ssen.co.uk/UnmeteredSupplies/>
- <https://www.ssen.co.uk/CompetitionInConnections/>



# Electric Vehicle Charging Points

## Contestable and Non-Contestable Elements

- Point of supply (POS)
- Point of Connection (POC)





# Full calendar of events

- National Events
- Engagement days
- Connections Surgeries
- Online Webinars
- View our events calendar on the SSEN website to find out where we will be next.....

[www.ssen.co.uk/stakeholderevent/basicsearch](http://www.ssen.co.uk/stakeholderevent/basicsearch)



# Customer Enquiries

How to apply

- **Online Application:** [www.ssen.co.uk/Connections/Developers](http://www.ssen.co.uk/Connections/Developers)
- **Email to:** [connections@sse.com](mailto:connections@sse.com)
- **Post:** Scottish and Southern Electricity Networks  
Connections and Engineering  
Walton Park  
Walton Road  
Cosham PO6 1UJ
- **Phone:** 0800 048 3516



Frank Clifton  
Innovation Strategy Manager

Future Challenges and Opportunities

# The Primary Challenge.

## The Energy Trilemma

Affordable

*Reliable*

Sustainable

## Carbon Targets

Distributed Generation

Electrification of Transport

Electrification of Heat

## Economic Stimulus

Sustainable Growth

Industrial Strategy

Entrepreneurship

## Political principles

Democratization of energy

Community Energy

Market liberalization?

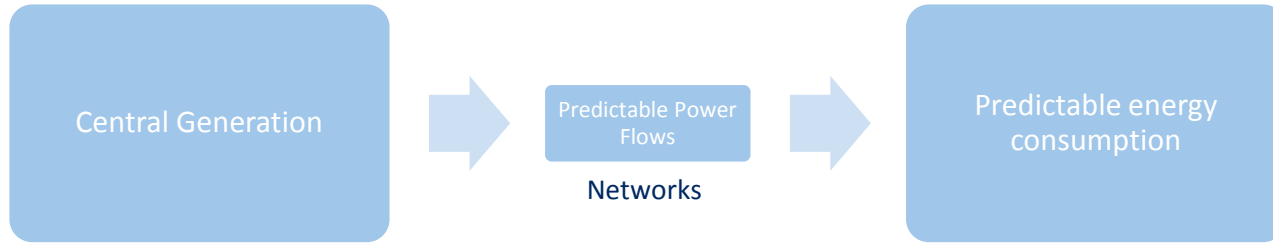
## Technical advances

Digitization

Energy Storage and flexibility

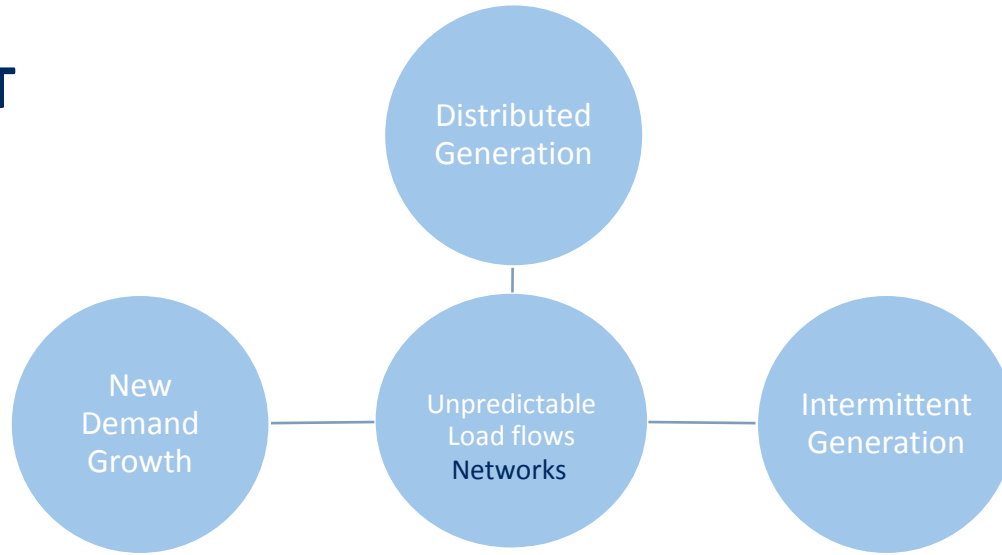
Smart Metering

# PAST

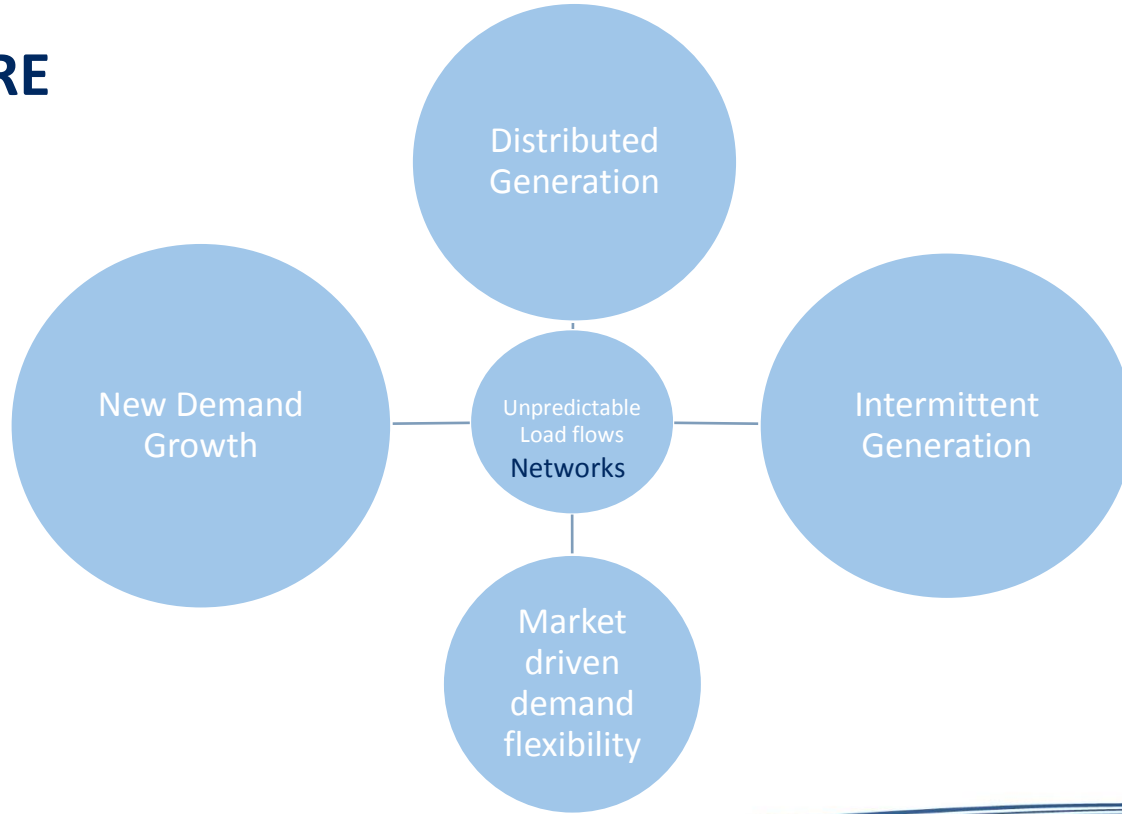




# PRESENT



# FUTURE



# Challenges

Managing Congestion  
while facilitating Markets



Smart Solutions



Active Management



Price Signals

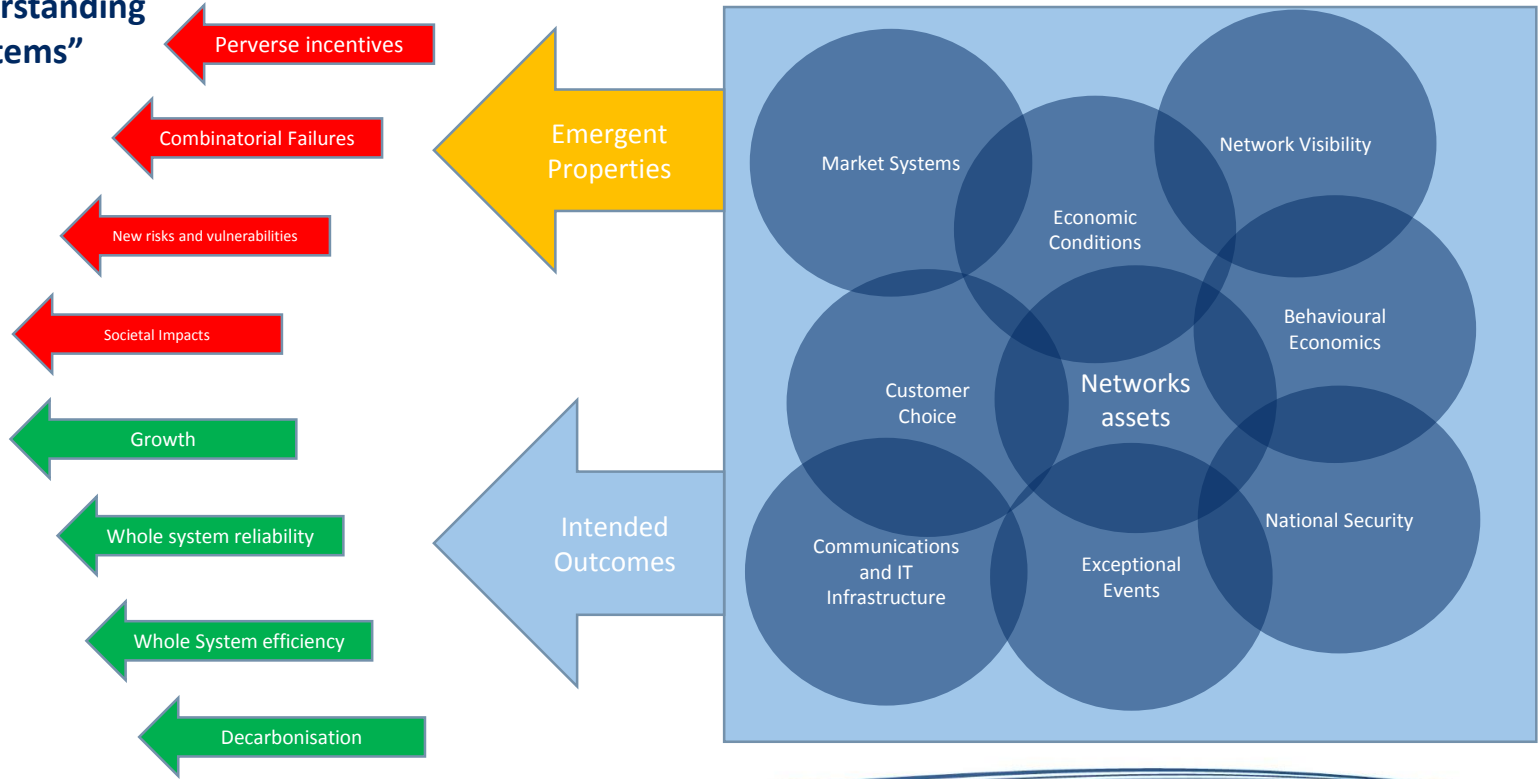


Network Investment



# Challenges

Managing and understanding complex "Mega Systems"



# Perspectives



- Reward those that have flexible demand



- Penalise those that cannot use demand flexibly

- Stimulate markets



- Create opportunities for gaming

- Maximise the utilisation of the network



- Minimise the resilience of the network

- Digitise the Energy System



- Increase system interdependencies

- Enable Community energy trading



- Penalise those that don't belong to communities

- User pays



- Remove the energy universal service obligation

- Promote competition between DNOs



- Generate duplication



# The Transition to Distribution System Operation (DSO)

*“A Distribution Operator (DSO) securely operates and develops an active distribution system comprising networks, demand, generation and other flexible distributed energy resources (DER).*

*As a neutral facilitator of an open and accessible market, it will enable competitive access to markets and the optimal use of DER on distribution networks to deliver security, sustainability and affordability in the support of whole system optimisation.*

*A DSO enable customers to be both producers and consumers; enabling customer access, customer choice and great customer service”.*

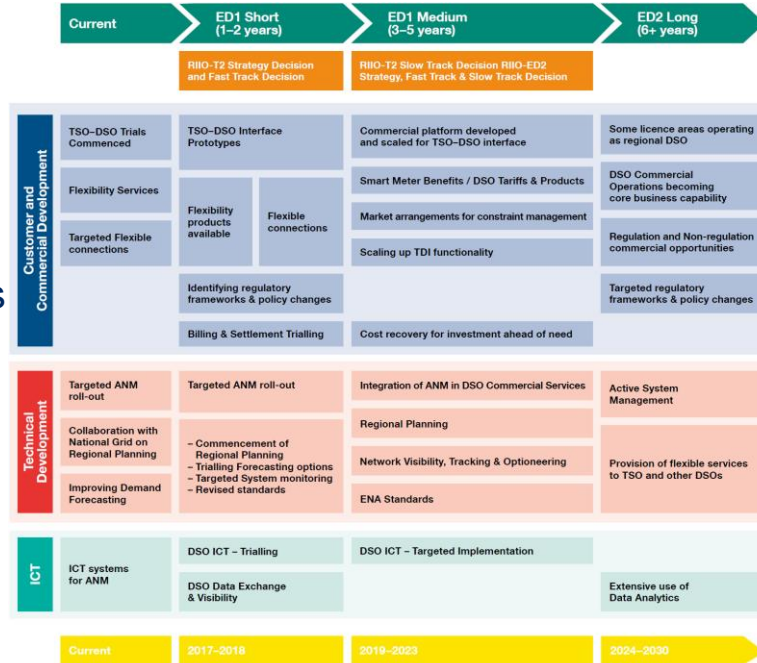
# DSO Principles

So we have developed our DSO principles.



# DSO Roadmap & Market Modelling

- We have set out a roadmap for evolution
- We are currently modelling 5 market models
- Define the options, then understand costs and benefits of each to feed into future Ofgem & Government consideration of policy/regulatory framework
- Undertaking Impact Analysis of the models



The Roadmap ensures that network operators are moving at an appropriate pace and customers and opportunities are being made available to flexibility service providers.

There are activities happening now to contract for flexibility services at DNOs.

## In conclusion.

- Irrevocable challenges are being placed on all Energy networks
- There is no single solution
- The solutions bring their own challenges
- Systems thinking is key
- Demonstration and incremental learning is key
- Customers are pivotal to the solutions
- The Industry is responding and co-ordinated.



<https://www.ssepd.co.uk/Innovation/>

# Thankyou

<http://www.smarternetworks.org/>

