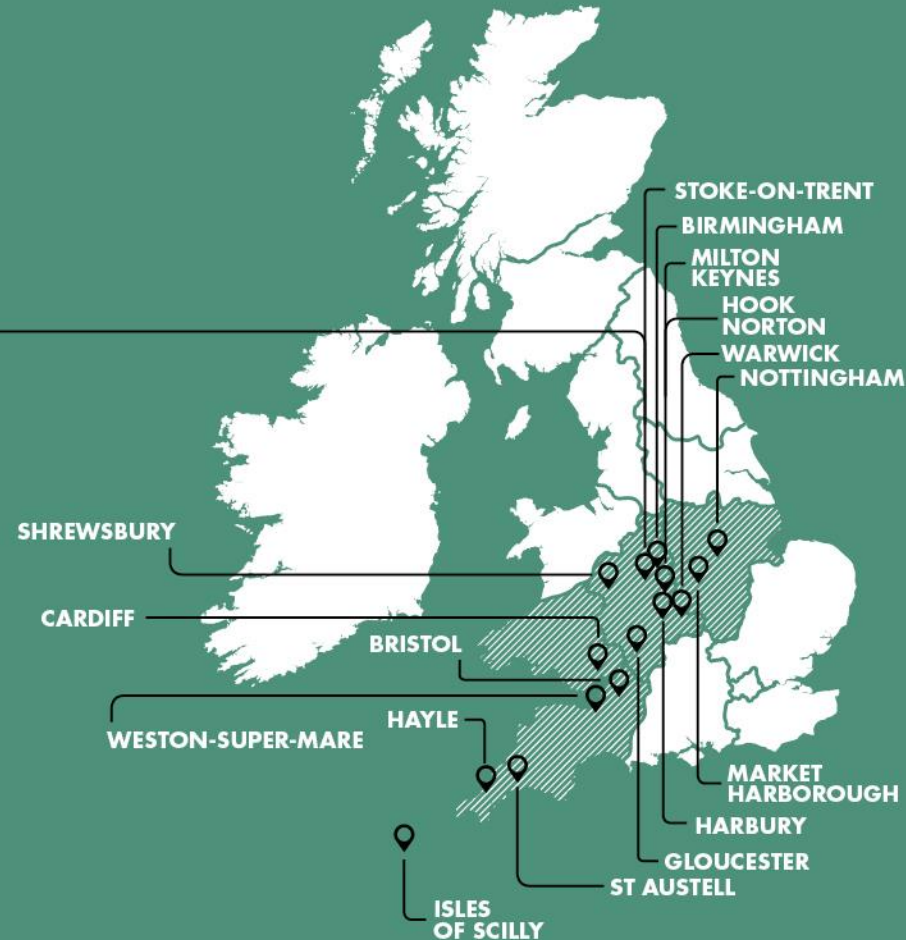
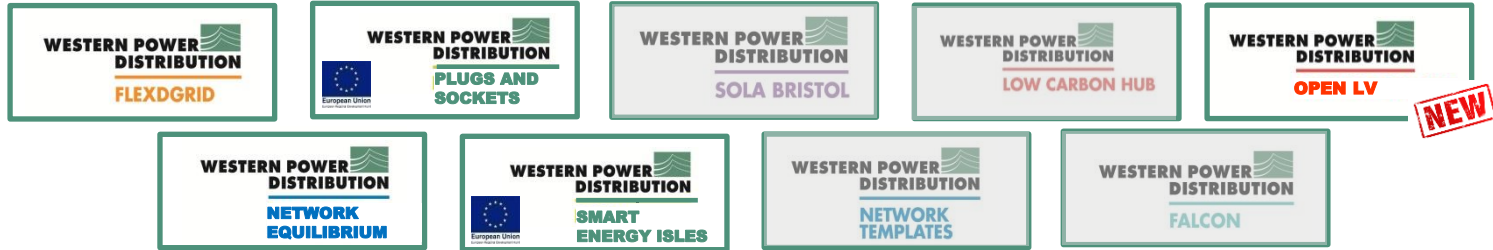


# NEXT GENERATION NETWORKS

Project Entire

**Matt Watson**  
Innovation & Low Carbon Networks Engineer





## Future Networks Programme

### Assets

- Telemetry
- Decision support
- Improved assets
- New assets
- Flexibility
- Automation
- Incident response



### Customers

- New connections
- Upgrades
- Information
- Self Serve
- Products/Service
- Tariffs
- Communities



### Operations

- Reliability
- Forecasting
- DSO
- DSR
- GBSO Interface
- Efficiency
- SHE and Security



## Network and Customer Data

- Airborne Inspections
- AIRSTART<sup>1</sup>
- Telecoms Analysis
- Superconducting Cable
- SF6 Alternatives
- MVDC Test Lab
- Smart Energy Laboratory
- Statistical Ratings
- Primary Network Power Quality Analysis

- Hybrid Heat Pump Demonstration
- Hydrogen Heat & Fleet
- Carbon Tracing
- HV Voltage Control
- Solar Storage
- LV Connect and Manage
- Sunshine Tariff
- CarConnect
- Industrial & Commercial Storage

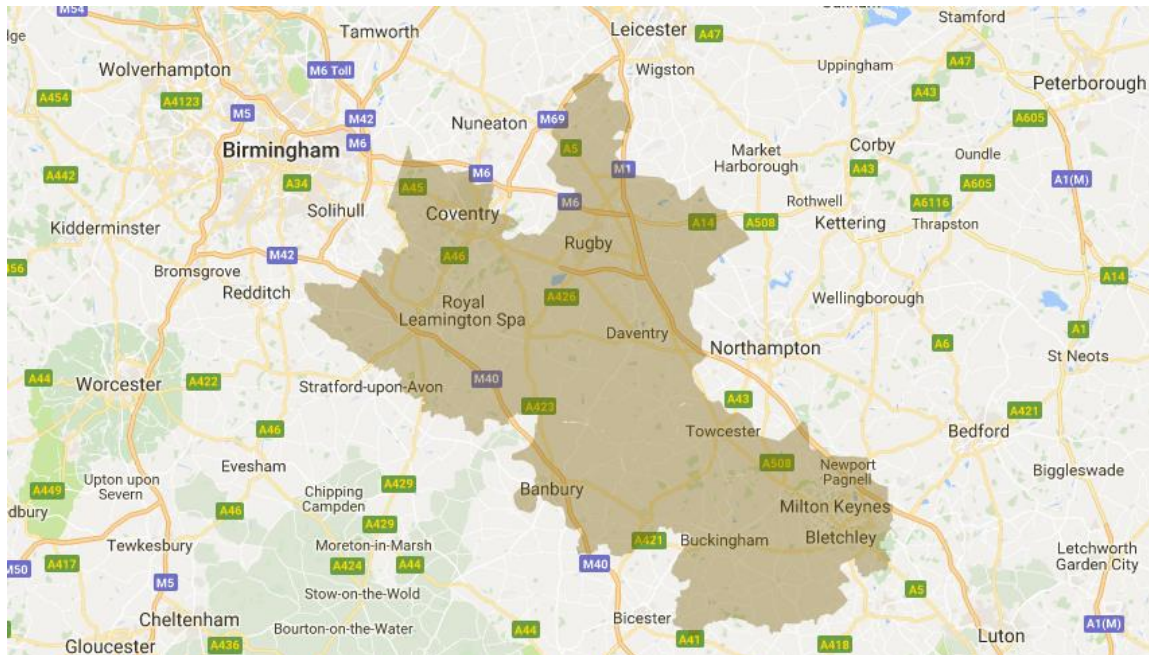
- DSO/SO Shared Services
- Project SYNC
- Project ENTIRE
- Smart Meter data for Network Operations
- Distribution Operability Framework
- Times Series Data Quality
- Voltage Reduction Analysis
- LV Connectivity
- Smart Systems and Heat<sup>2</sup>

## Project Entire

- A key DSR project following on from FALCON and SYNC
  - Focus on commercial mechanisms and revenue stacking
  - How to make DNO led DSR commercially viable
  - Interaction between DNO and SO led DSR
  - Understand scalability of DSR
  - Fits into wider DSO and active networks innovation
  - Looking for alternative solutions to 132kV reinforcement
-

# What we are doing?

- Facilitating 5 WPD CMZ services in the East Midlands
- Developing managed service
- Developing technical systems and processes
- Wider engagement in target area





# Customer proposition



# Customer Proposition

- Creation of Flexible Power branding
- Simplifying DSR programmes into single service
- Customer engagement and recruitment
- Increasing profile of DSR in target area
- Revenue stacking from multiple programmes

# Managed Service

- Advanced control capability from new centralised facility
- Continuous monitoring of assets with alerts and alarms
- Agreed operating procedures taking away local resource burdens.
- Customer has ultimate control of inhibiting dispatch
- Simplifying DSR for customers
- Asset optimisation
- Self service statements and reports through customer portal

# Services

Simple CMZ service:

- Week ahead notification of probable requirement
  - Arming fee assures of profit
  - Utilisation fee covers operating costs
  - Designed to integrate with other services
  - No deductions for service payments
- 
- Key driver behind the project



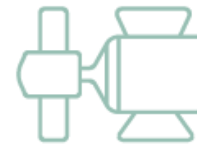
# Services

Stacked service:

- CMZ
- Flexible STOR
- TRIAD Avoidance
  
- Simple managed services
- Flexible Power will declare participants in and out of the different revenue streams

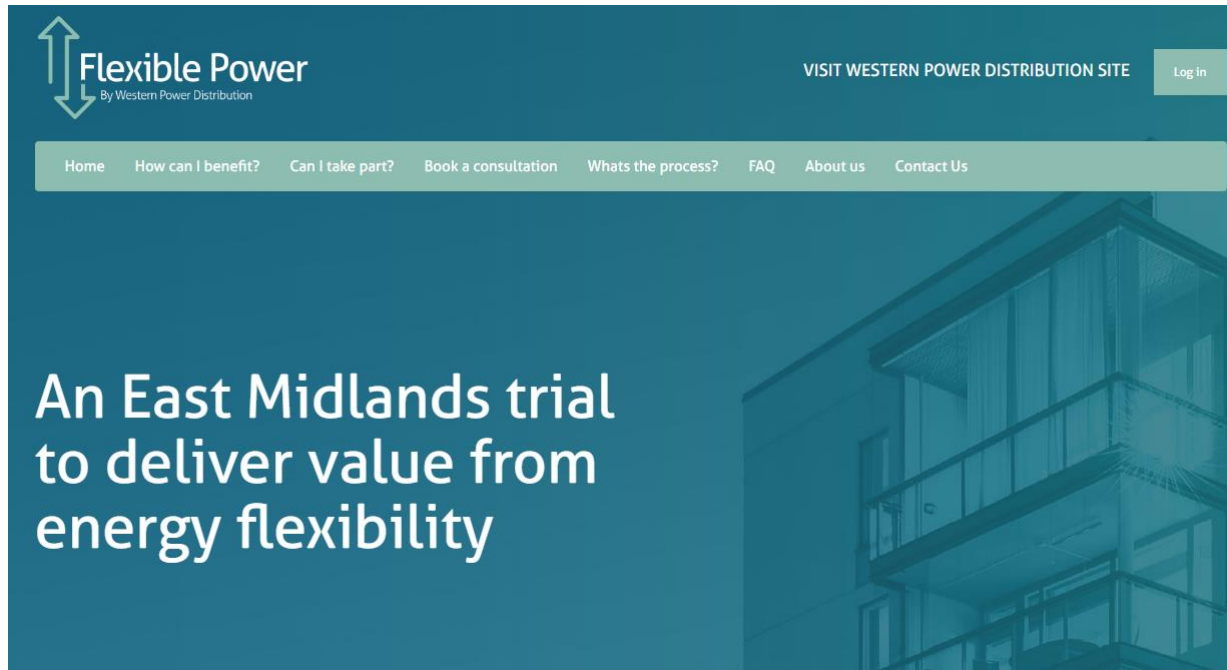
# Who are we targeting?

- Half hourly metered customer in the target area
- Ability to reduce demand or increase generation within 15 minutes of a signal and hold for at least 2 hours
- Simple or managed service
- Direct customers or through aggregators



# How to get involved

- [www.flexiblepower.co.uk](http://www.flexiblepower.co.uk)



- [Wpdflexiblepower@westernpower.co.uk](mailto:Wpdflexiblepower@westernpower.co.uk)

