Agenda

• Introduction
• What we do now
• What the future holds
• How we get there

• Q&A
UK Power Networks

- Population served: 18m
- Peak demand: 16 GW
- Overhead lines: 45,849 km
Our Vision

AN EMPLOYER OF CHOICE
Safest
Best employer

A RESPECTED CORPORATE CITIZEN
Most reliable
Best service
Most innovative
Most socially responsible

SUSTAINABLY COST EFFICIENT
Lowest cost
Looking after the network

- 45,849 km of overhead lines
- Inspection regime:
  - Towers (yearly)
  - Wooden poles (6 years)
  - Pre-outage and post-fault

Helicopter and foot patrol
Faults identified by helicopter

Leaning pole
Drones

Small  Safe  Quiet  Cheap  Green
Drone Pathfinder Programme

Civil Aviation Authority

Department for Transport

Department for Business, Energy & Industrial Strategy

CATAPULT

Connected Places

UK Power Networks

Delivering your energy
The Drone Code

50m

150m
Project: Above and Beyond

Funding Partners

Cadent
NORTHERN POWERGRID
WALES & WEST UTILITIES
UK Power Networks
Scottish & Southern Electricity Networks
Northern Gas Networks
national grid

Delivery Partners

EIC
Collaborate to innovate
Callen-Lenz
CATAPULT
Connected Places
Wales & West Utilities

- 2,362km of high pressure pipelines
- Fortnightly surveillance flights
Project Outputs

• Concept of operations
• Operational planning software tool
• Technical business enablers
• Safety cases
• Acceptable to regulators, networks and the Connected Places Catapult
Trials

- Segregated Airspace, 2019
  - South Wales
  - Lincolnshire
- Non-Segregated Airspace, 2020
Case Study – Baglan Bay

Traditional survey

Drone survey
Case Study – Chepstow Bridge

Traditional survey

Drone survey
Photos from a helicopter

“Ivy pole”

Child’s tricycle on HV line
Photos from a drone
Questions?

Rona.Mitchell@ukpowernetworks.co.uk