Broadband in the Marches

Briefing to Marches LEP Board

19/9/17

- Fast, reliable & resilient internet access increasingly important for business and society
- Growing number of commercial and service interactions delivered exclusively On-Line
- Greater need to run multiple applications across the same connection
- Data consumption increasing c. 30% per year
- Increased need to access fast upload potential particularly for some business sectors

- Broadband provision is a commercial not a public service
- Availability driven by commercial viability
- Access is not universal
- Rural exponentially more expensive but not exclusively a rural problem
- Expectations of need are high and often ill informed

Local BDUK Projects

- Active since 2012

Functions

- Market Failure Observers

→ to assess and record the superfast coverage gap

- Conduits for Public Funding (BDUK, Local Authorities, ERDF)
- Solution commissioners
- State Aid compliance
- Contract managers

→ to reduce the superfast coverage gap with gap funding

- Infrastructure
  - High bandwidth internet access
  - Superfast = Infrastructure capable of supporting download speeds >30Mbps
  - Different technologies can provide access but not all are comparable
- Services
  - 30Mbps (minimum bandwidth for 'Superfast' or 'Next Generation Access')
  - Download vs Upload – Can be Symmetric / Asymmetric
  - Many suppliers offer different products and services via the infrastructure
  - 'Speed' is never guaranteed, can vary by provider, time of day, & location
  - The advertising of retail services is governed by the Ofcom and ASA

Fibre To The Cabinet (FTTC)

The fibre connection goes to a powered cabinet in the street. The final connection to premises is on copper.
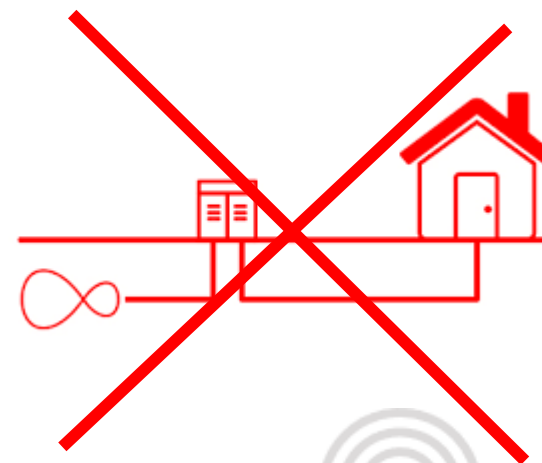
Fibre To The Premise (FTTP)

The fibre connection goes all the way from the main network to the premises.

Gigaclear
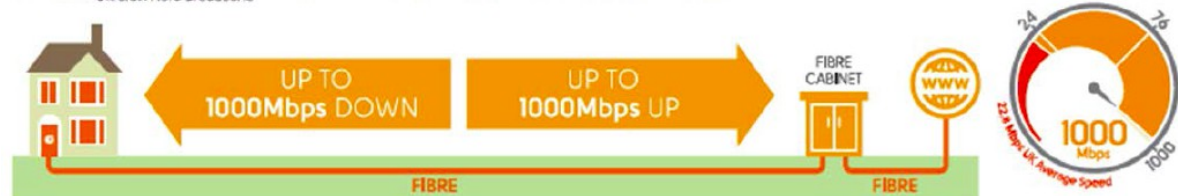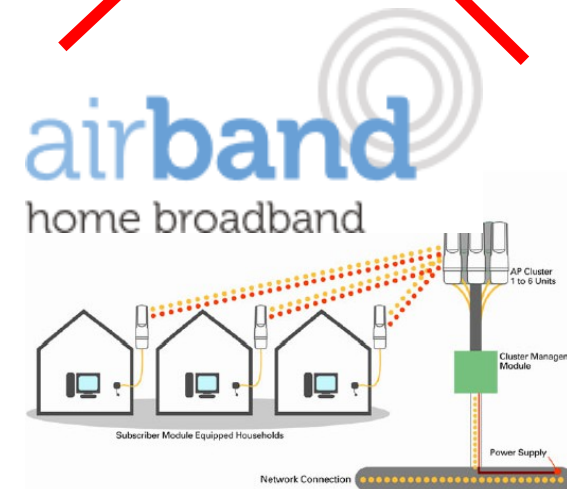Ultrafast Fibre Broadband

FTTP = Pure 'Fibre-to-the-premises'

UP TO 1000Mbps DOWN

UP TO 1000Mbps UP

FIBRE CABINET

FIBRE

FIBRE

Pure Fibre Broadband - speeds are unaffected by distance or weather conditions

Up to 80Mbps

Up to 330Mbps

Up to 1,000Mbps

airband
home broadband

Up to 160Mbps

Up to 30Mbps

Herefordshire			Shropshire			Telford & Wrekin		
Contract	Subsidy available	Eligible Premises >30Mbps	Contract	Subsidy available	Eligible Premises >24Mbps	Contract	Subsidy available	Eligible Premises >24Mbps
BT	£19.9m	36,000	BT	£22.1m Inc. £5.02m RGF	56,000	BT	£4m Inc. £1m RGF	8,900
Gigaclear	£9.7m Inc. £1.6 RGF	10,200	Airband	£9.8m	13,000			

County of Herefordshire Superfast and Fibre Coverage
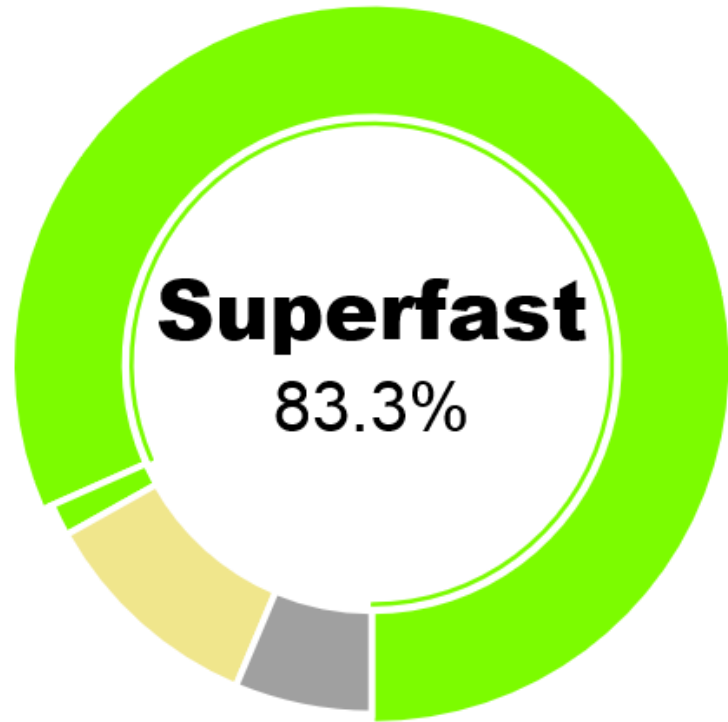
Superfast
83.3%

Superfast UK (>24 Mbps):	**84.11%**	Below 2 Mbps (USC):	**2.70%**
Superfast EU (>30 Mbps):	**83.31%**	Below 10 Mbps (USO):	**8.68%**
Openreach (>30 Mbps):	**83.24%**	Below 15 Mbps:	**11.06%**
Ultrafast (>100 Mbps):	**10.49%**	Virgin Media Cable:	**0.00%**
Openreach FTTP (Native):	**10.21%**	FTTP or FTTH	**10.49%**

County of Herefordshire Speed Test Results (Mbps)

ADSL, ADSL2+, FTTC, fibre, cable, mobile and wireless speeds   ?

Estimated Takeup: ADSL 49.9% FTTC 42.2% FTTH 8%
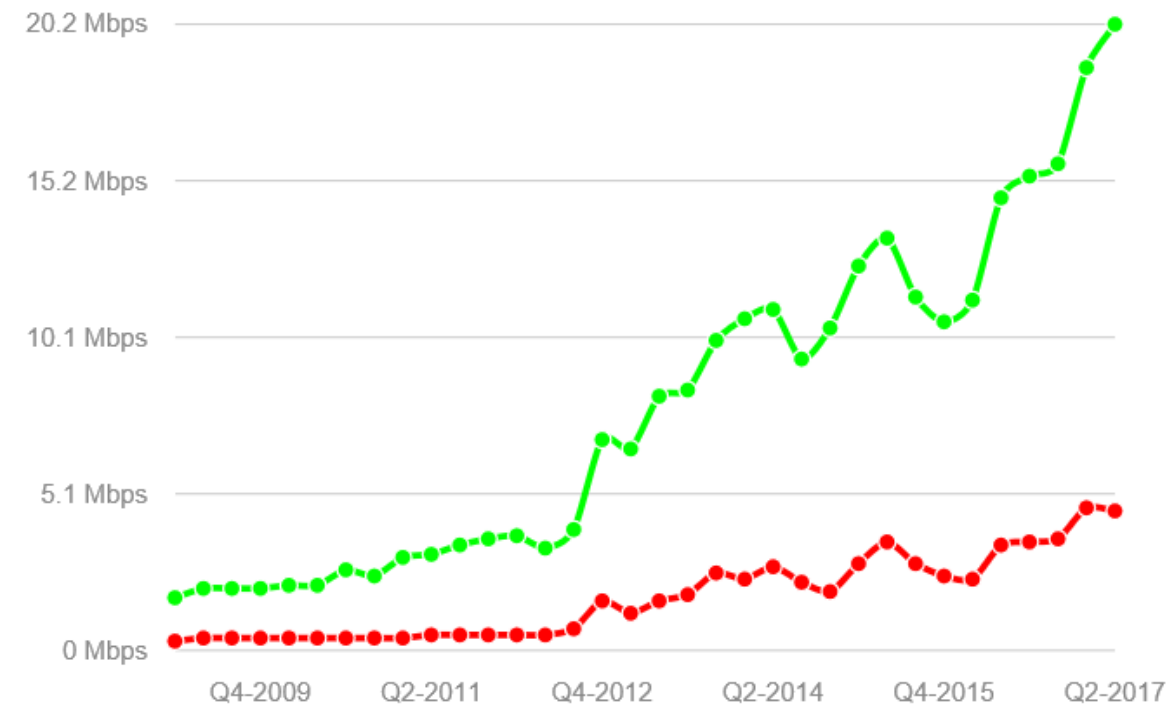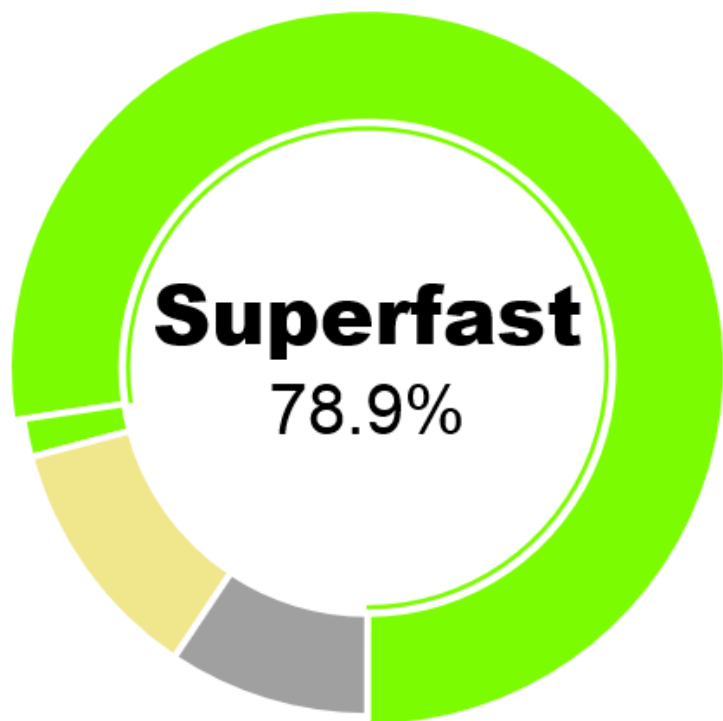

Estimated Maximum Mean Download Speed:	**68.6 Mbps**

This figure is based around everyone buying the fastest Virgin Media, KC or Openreach product available to them, based on current product availability. Distance limitations of ADSL2+ and VDSL2 are factored into the calculation.

Shropshire Superfast and Fibre Coverage

Superfast
78.9%

|				
Superfast UK (>24 Mbps):	**79.92%**		Below 2 Mbps (USC):	**3.33%**
Superfast EU (>30 Mbps):	**78.87%**		Below 10 Mbps (USO):	**11.61%**
Openreach (>30 Mbps):	**78.80%**		Below 15 Mbps:	**14.54%**
Ultrafast (>100 Mbps):	**7.02%**		Virgin Media Cable:	**3.45%**
Openreach FTTP (Native):	**3.57%**		FTTP or FTTH	**3.57%**

Shropshire Speed Test Results (Mbps)

Any | Openreach | ADSL | FTTC | Cable | FTTH | 3G/4G

ADSL, ADSL2+, FTTC, fibre, cable, mobile and wireless speeds ?

Estimated Takeup: ADSL 50.1% FTTC 45.7% Cable 1.7% FTTH 2.5%
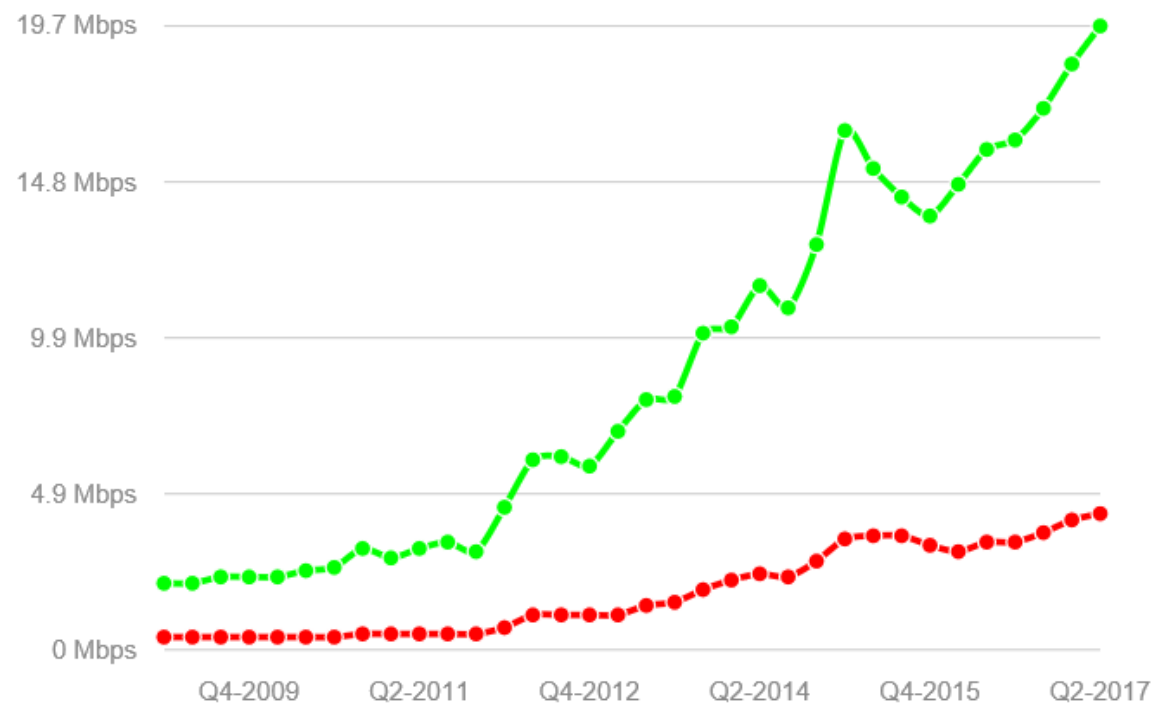
Estimated Maximum Mean Download Speed: **56.7 Mbps**

This figure is based around everyone buying the fastest Virgin Media, KC or Openreach product available to them, based on current product availability. Distance limitations of ADSL2+ and VDSL2 are factored into the calculation.
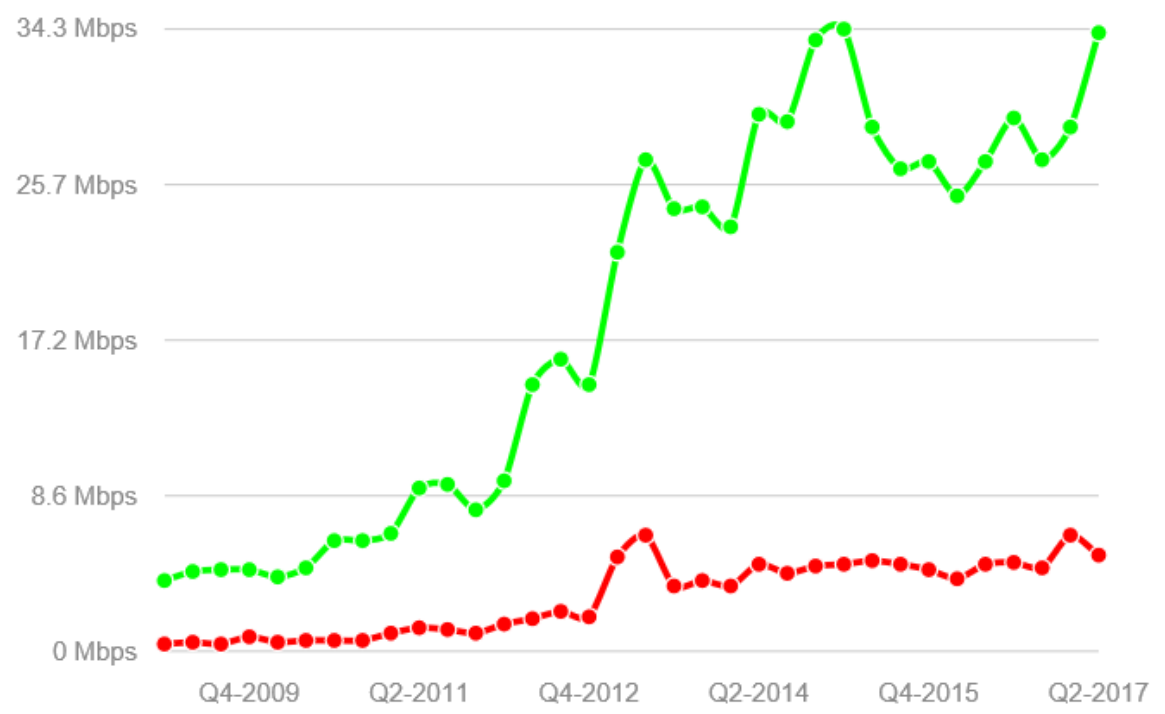
Telford and Wrekin Superfast and Fibre Coverage
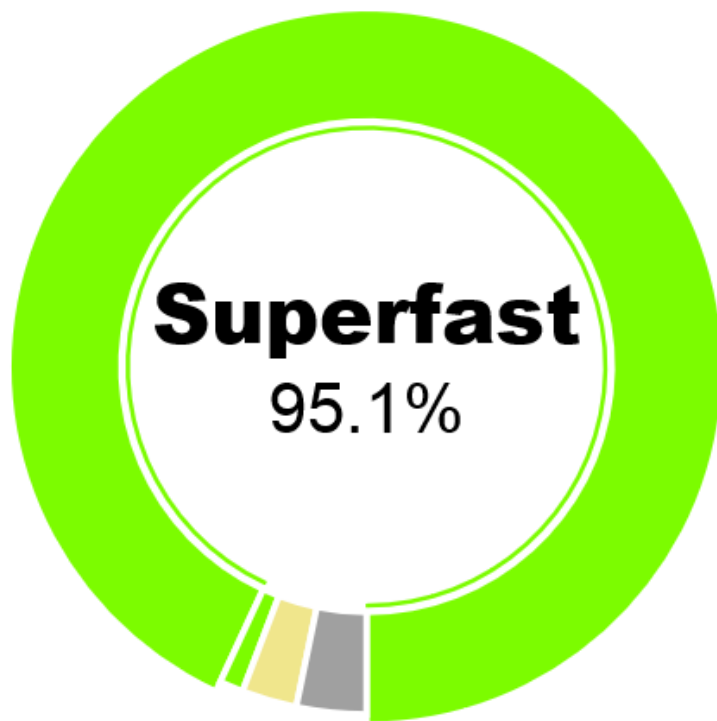
Superfast
95.1%

Superfast UK (>24 Mbps):	**95.53%**	Below 2 Mbps (USC):	**0.53%**
Superfast EU (>30 Mbps):	**95.14%**	Below 10 Mbps (USO):	**1.91%**
Openreach (>30 Mbps):	**90.90%**	Below 15 Mbps:	**2.90%**
Ultrafast (>100 Mbps):	**79.75%**	Virgin Media Cable:	**79.75%**
Openreach FTTP (Native):	**0.00%**	FTTP or FTTH	**0.00%**

Telford and Wrekin Speed Test Results (Mbps)

Any Openreach ADSL FTTC Cable 3G/4G

ADSL, ADSL2+, FTTC, fibre, cable, mobile and wireless speeds ?

Estimated Takeup: ADSL 30.7% FTTC 32.4% Cable 36.9%

34.3 Mbps

25.7 Mbps

17.2 Mbps

8.6 Mbps

0 Mbps

Q4-2009   Q2-2011   Q4-2012   Q2-2014   Q4-2015   Q2-2017

Estimated Maximum Mean Download Speed: **246.6 Mbps**

This figure is based around everyone buying the fastest Virgin Media, KC or Openreach product available to them, based on current product availability. Distance limitations of ADSL2+ and VDSL2 are factored into the calculation.
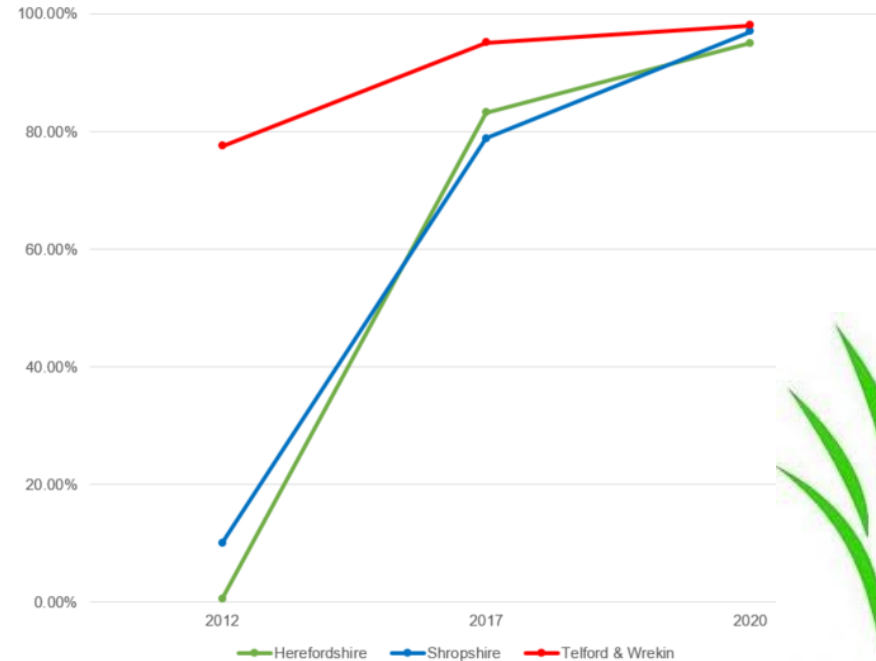
Progression since 2012

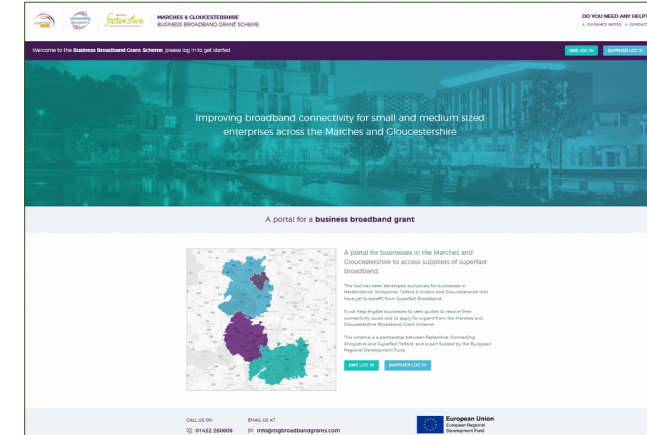|	>30Mbps Mar 2012	>30Mbps Sep 2017	>30Mbps Forecast by end 2019	Estimated Coverage Gap without further intervention
Herefordshire	0.6%	83.18%	95%	4,000
Shropshire	10.1%	78.79%	97%	1,845 (3,728)
Telford & Wrekin	77.5%	95.1%	98%	900

Focus for EU Funding

UK Average
93.2% >30Mbps
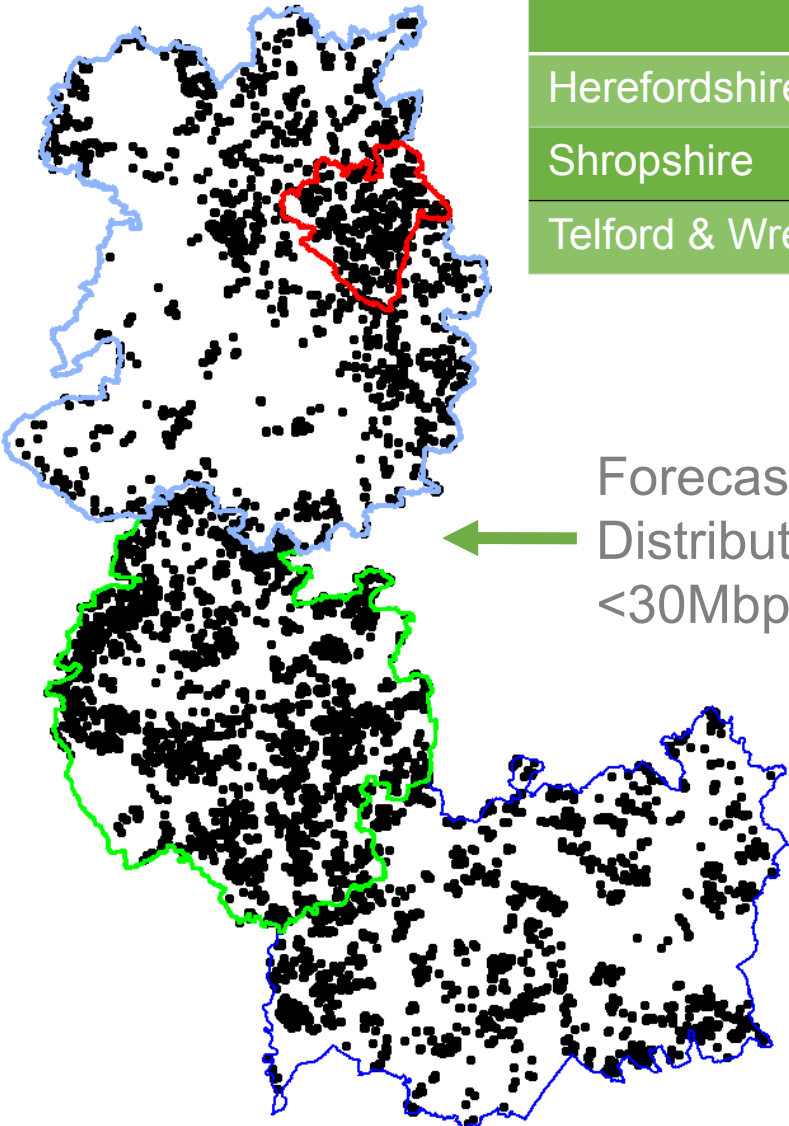
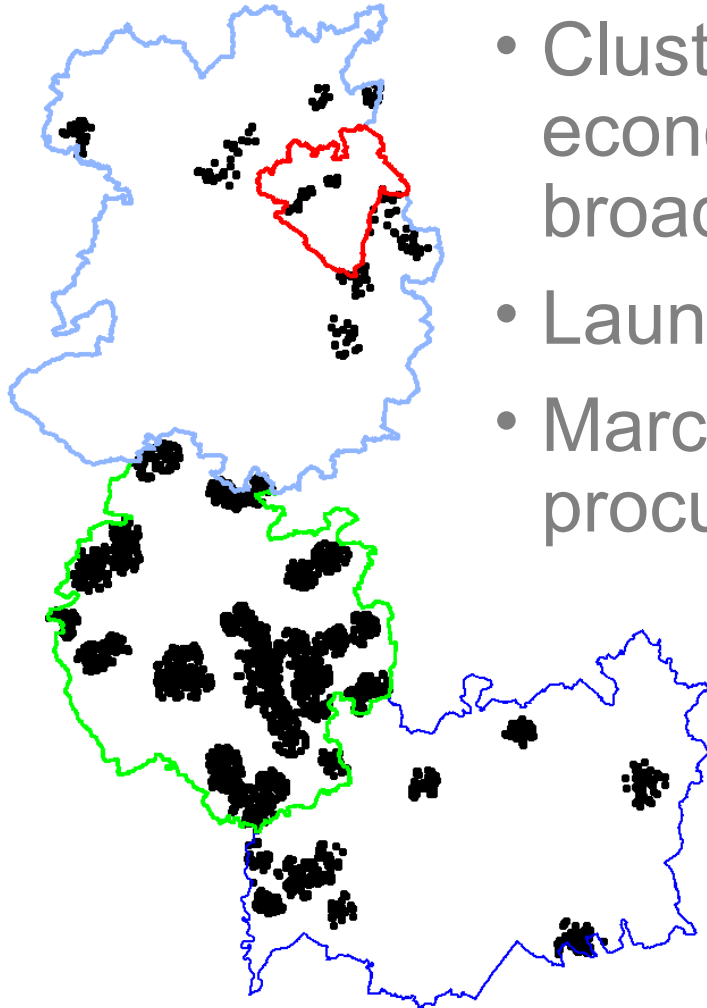Forecast Distribution of <30Mbps 2019

ERDF

- Marches & Gloucestershire Business Broadband Grant
- £4.5m
- Up to £25k per business of up front capital funding
- NGA / Business Grade Broadband to individual SMEs
- Can be aggregated
- Beneficiaries will need to demonstrate economic benefit
- Managed through an Online Portal that allows eligible SMEs to illustrate their requirements and receive compliant quotes in a timely manner
- 20+ suppliers registered
- www.mgbroadbandgrants.com

EAFRD

- Clusters of white premises ranked in order of the latent economic potential (restrained by the lack of superfast broadband)

- Launches on September 22nd

- Marches and Gloucestershire bidding for c. £3.4-4.8m to procure and manage a supplier/s

  - All counties will have a ring-fenced budget
  - To be delivered by end of 2019

The European Agricultural Fund for Rural Development: Europe investing in rural areas