

Broadband and 5G

25/7/18

Local BDUK Projects



Programmes active since
2012

Marches Broadband Programme role:

- Market failure – observers/moderators



to assess and record the commercial gaps



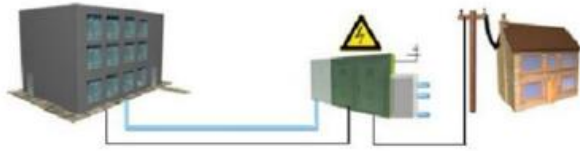
to reduce the superfast coverage gap with gap funding

- Conduits for Public Funding (BDUK, Local Authorities, ERDF)
- Solution Commissioners
- State Aid Compliance
- Contract Managers
- Commercial market engagement MNO's/Altnets
- Conduit to Gvt for intervention opportunities
- Ofcom/LGA engagement/lobbying



Fibre To The Cabinet (FTTC)

The fibre connection goes to a powered cabinet in the street. The final connection to premises is on copper.



Up to 80Mbps

Fibre To The Premise (FTTP)

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



Up to 330Mbps

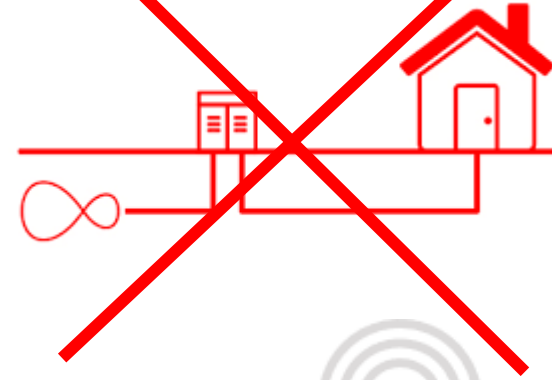
Gigaclear FTTP = Pure 'Fibre-to-the-premises'



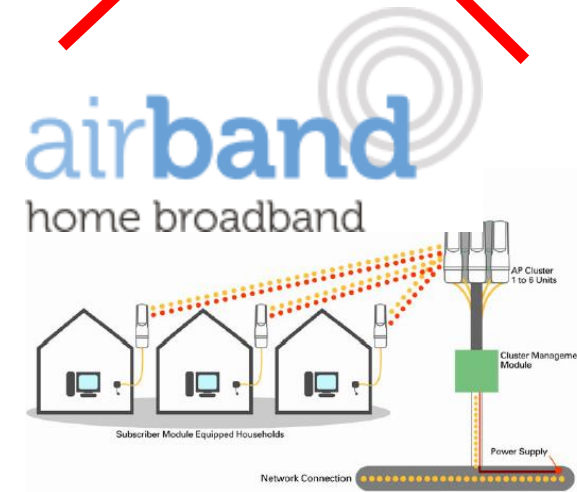
Pure Fibre Broadband - speeds are unaffected by distance or weather conditions

Up to 1,000Mbps

Intervention Contracts



Up to 160Mbps

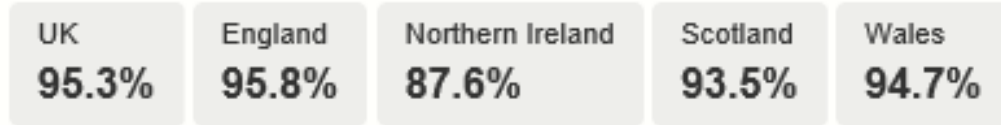


Up to 30Mbps

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. £2.74m RGF	56,000	BT	£4m Inc. £1m RGF	8,900
Gigaclear	£9.7m Inc. £1.6 RGF	10,200	Airband	£9.8m Inc. £2.27m RGF	13,000			
Contracts due to close 2020			Contracts due to close June 2021			In Contract Closure		

Over 24 Mbps UK definition

Generated: 19-07-2018



Over 30 Mbps EU definition

Generated: 19-07-2018



The generated date is when coverage was at the figures quoted. There is a small amount of lag between broadband infrastructure providers making services available and appearing in the statistics. For VDSL2/FTTC services this is around 2 to 4 weeks, and for FTTP (full fibre) a further couple of weeks should be allowed. If you have a service available and our searches do not indicate it is do feel free to [report an addition](#).

We aim to update the coverage percentages weekly, with the underlying service availability for postcode searches changing several times in a week.

The Governments 95% superfast target is based on the over 24 Mbps definition for superfast services.

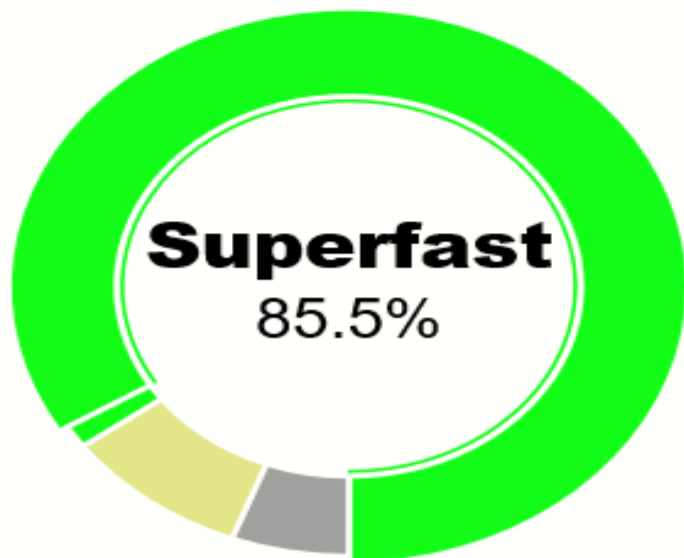
Take Up across LEP

	Herefordshire		Gloucestershire		Shropshire		Telford
Technology	BT	Gigaclear	BT	Gigaclear	BT	Airband	BT
FTTC	45.15%	N/A	47.31%	N/A	45%	N/A	32%
FTTP	36.1%	Too Soon	22.51%	30%	28%	N/A	N/A
FWA	N/A	N/A	N/A	N/A	N/A	Too Soon	N/A

County of Herefordshire Superfast and Fibre Coverage

Latest Figures

History



Authority classed as Rural-50 (R50)

Superfast UK (>24 Mbps): 86.18%

Superfast EU (>30 Mbps): 85.47%

Ultrafast (>100 Mbps): 12.95%

Openreach (>30 Mbps): 85.10%

Openreach FTTP: 11.89%

Openreach G.fast: 0.00%

'Fibre' partial/full at any speed: 94.85%
(FTTC/VDSL/G.fast/Cable/FTTP)

Below 2 Mbps down: 2.36%

Below 10 Mbps down: 6.92%

Below 10 Mbps, 1 Mbps up:
(Legal USO) 9.90%

Below 15 Mbps:
(High Speed Broadband) 9.68%

Virgin Media Cable: 0.00%

Full Fibre (FTTP or FTTH): 12.95%

County of Herefordshire Speed Test Results (Mbps)

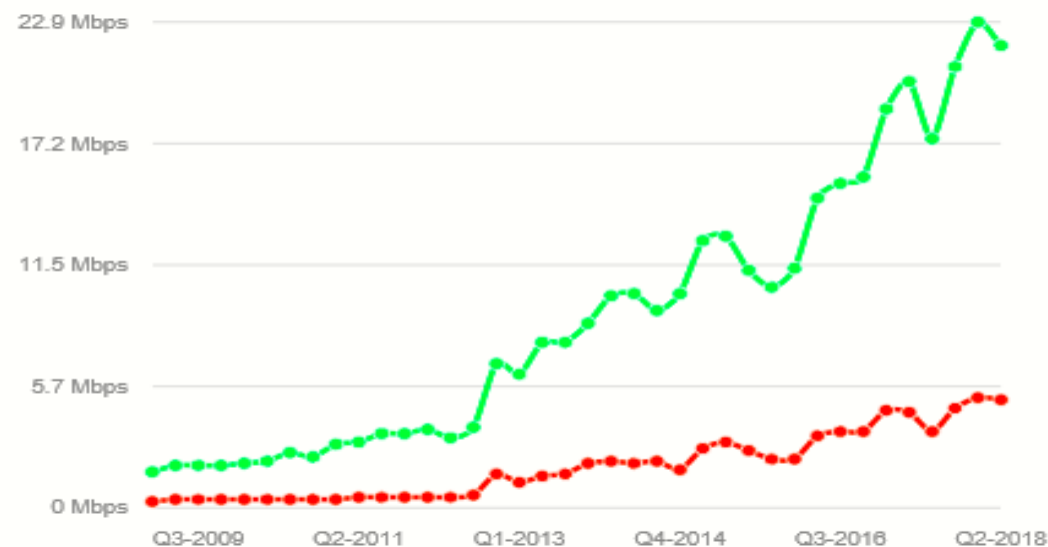
Last Quarter

History

Any Openreach ADSL FTTC Cable FTTH 3G/4G

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

Estimated Takeup: ADSL 45.2% FTTC 47.2% FTTH 7.6%



Estimated Maximum Mean Download Speed:

81 Mbps

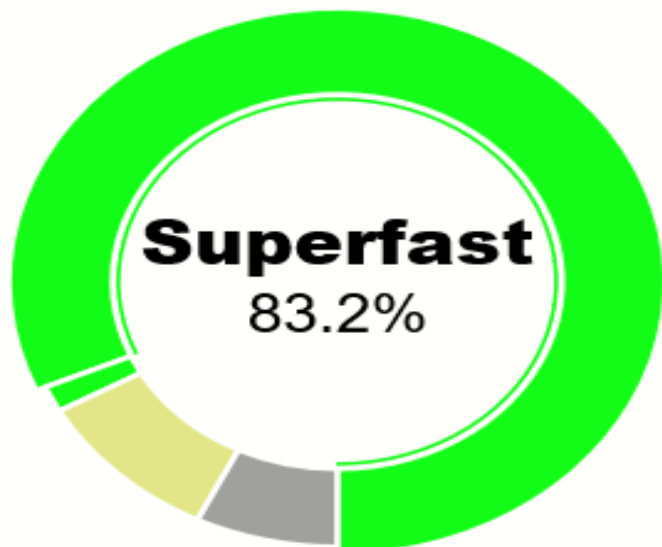
This figure is based around everyone buying the fastest Virgin Media, KC or Openreach product available to them, based on current product availability. Distance limitations of ADSL2+ and VDSL2 are factored into the calculation.

Speed test results are based on the analysis of results from our [speed test](#) or partners who use our speed test service. We believe this is the largest analysis of crowd sourced speed test data for the UK and the technology splits by area help to show what the public is experiencing for the different types of services across the UK.

Shropshire Superfast and Fibre Coverage

Latest Figures

History



Authority classed as Rural-50 (R50)

Superfast UK (>24 Mbps): **84.08%**

Superfast EU (>30 Mbps): **83.18%**

Ultrafast (>100 Mbps): **7.98%**

Openreach (>30 Mbps): **83.09%**

Openreach FTTP: **4.43%**

Openreach G.fast: **0.00%**

'Fibre' partial/full at any speed: **93.27%**
(FTTC/VDSL/G.fast/Cable/FTTP)

Below 2 Mbps down: **2.73%**

Below 10 Mbps down: **8.74%**

Below 10 Mbps, 1 Mbps up:
(Legal USO) **12.30%**

Below 15 Mbps:
(High Speed Broadband) **11.74%**

Virgin Media Cable: **3.53%**

Full Fibre (FTTP or FTTH): **4.45%**

Shropshire Speed Test Results (Mbps)

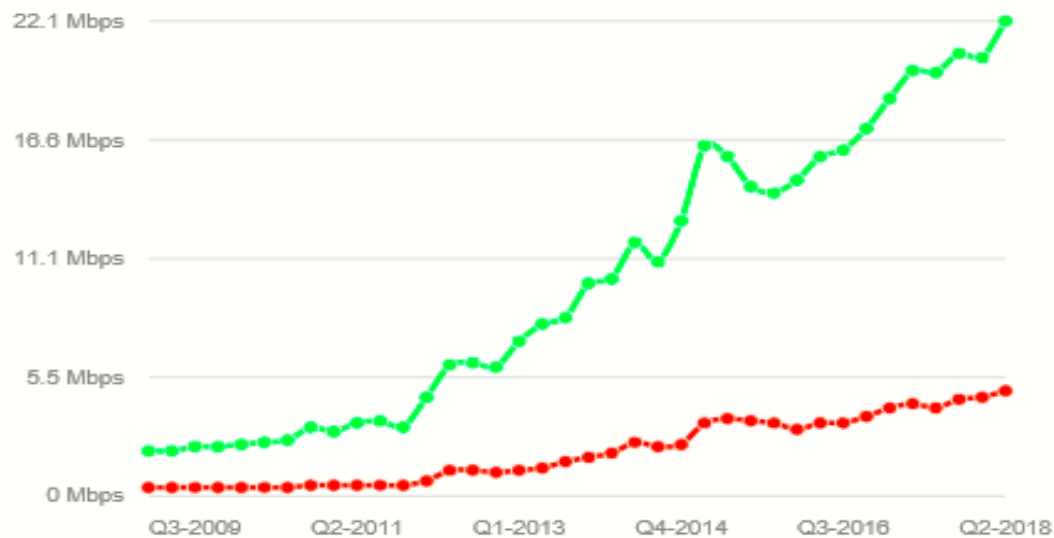
Last Quarter

History

Any Openreach ADSL FTTC Cable FTTH 3G/4G

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

Estimated Takeup: ADSL 43.1% FTTC 50.8% Cable 1.9% FTTH 4.1%



Estimated Maximum Mean Download Speed:

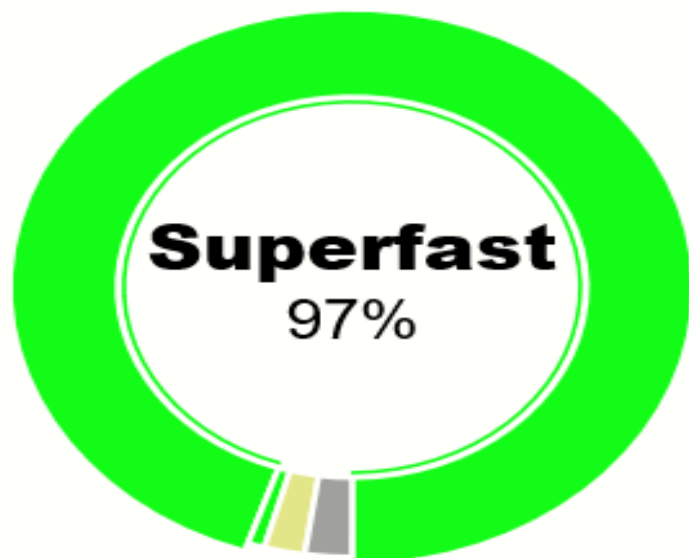
61 Mbps

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.

Speed test results are based on the analysis of results from our [speed test](#) or partners who use our speed test service. We believe this is the largest analysis of crowd sourced speed test data for the UK and the technology splits by area help to show what the public is experiencing for the different types of services across the UK.

Telford and Wrekin Superfast and Fibre Coverage

Latest Figures History ?



Authority classed as Other Urban (OU) ?

Superfast UK (>24 Mbps):	97.15%	Below 2 Mbps down:	0.39%
Superfast EU (>30 Mbps):	97.02%	Below 10 Mbps down:	0.77%
Ultrafast (>100 Mbps):	78.92%	Below 10 Mbps, 1 Mbps up: (Legal USO)	2.08%
Openreach (>30 Mbps):	95.48%	Below 15 Mbps: (High Speed Broadband)	2.11%
Openreach FTTP:	0.57%	Virgin Media Cable:	78.42%
Openreach G.fast:	0.57%	Full Fibre (FTTP or FTTH):	0.64%
'Fibre' partial/full at any speed: (FTTC/VDSL/G.fast/Cable/FTTP)	98.45%		

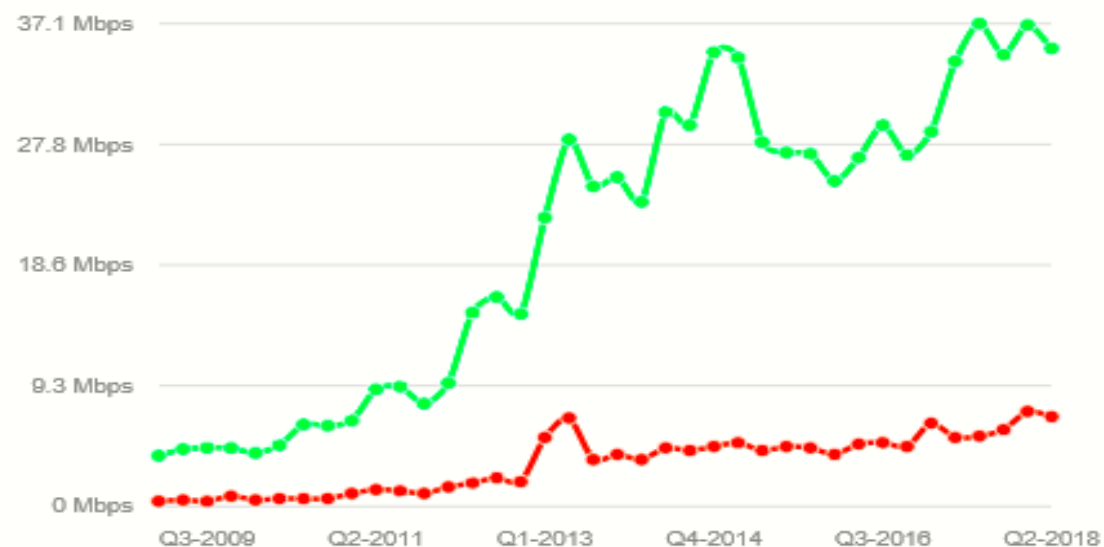
Telford and Wrekin Speed Test Results (Mbps)

Last Quarter History

Any Openreach ADSL FTTC Cable 3G/4G

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

Estimated Takeup: ADSL 24.7% FTTC 43.9% Cable 31.4%



Estimated Maximum Mean Download Speed:

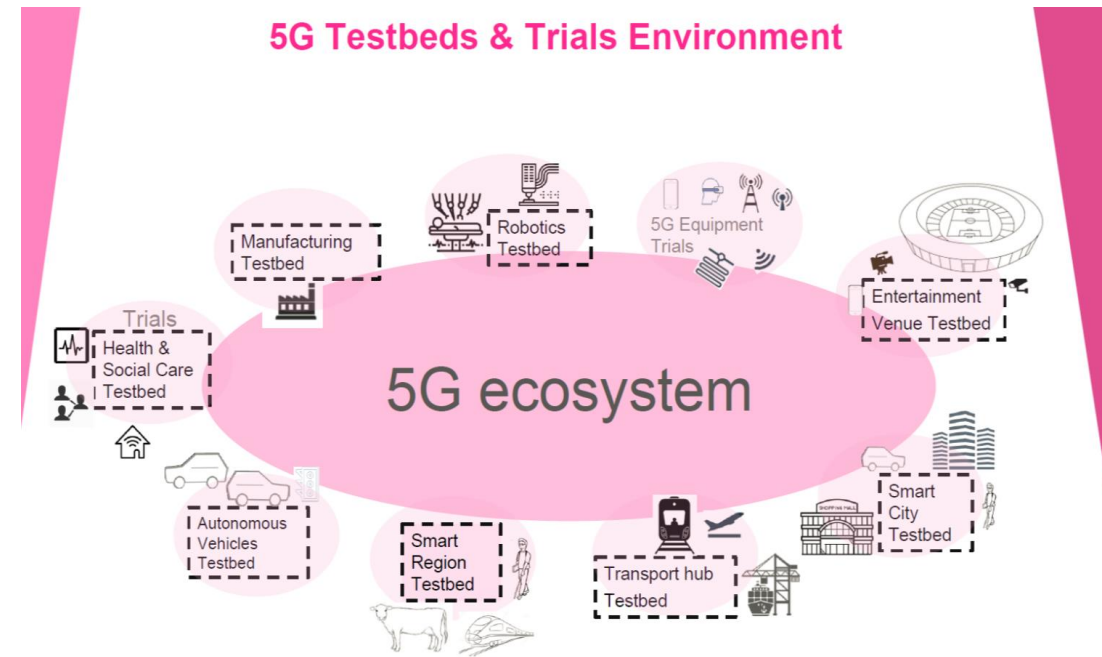
245 Mbps

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.

Speed test results are based on the analysis of results from our [speed test](#) or partners who use our speed test service. We believe this is the largest analysis of crowd sourced speed test data for the UK and the technology splits by area help to show what the public is experiencing for the different types of services across the

Next Steps - Digital Infrastructure

- All local bodies have individual strategies with challenging aspirations.
- Further market interventions ongoing alongside existing main contracts:
 - ERDF - £4m - £25k business grants (ave £14k)
 - EAFRD - £10.4m cluster project - £9m to be contracted across 18 lots
 - Fastershire/Shropshire looking at contract extensions
- Predominate rural geography, sparsity and premise distribution impacts commercial behaviour.
- Market and Government at a technology tipping point
 - 5 billion GVA opportunity
 - 1.4 billion devices expected by 2025
 - Disruptive technologies evolving uber/amazon
 - Full fibre/5g programme – pipeline in place upto 2021 (£740m)
- Timeline:
 - Full fibre – pipeline in place for project bids
 - 5G Rural First Test Bed – Harper Adams – Agri tech/automated vehicles
 - 5G Worcestershire LEP – IOT security/M2M - robotics
 - 5G Connected Cities – announcement in Summer 2018
 - 5G Connected Rural – commences in Summer 2018 - Marches/Worcestershire/Staffordshire
 - USO due by 2020;
 - National Infrastructure Commission recent headlines
 - Government and Ofcom should allow for copper switch-off by 2025
 - Gvt should part subsidise rollout to rural and remote communities, beginning by 2020
 - Telecoms Infrastructure Review due summer 2018
 - Full Fibre commitment by 2033



DCMS publications:

'The next generation mobile communication standard that is set to transform business and society'

'Aim is for UK to be a world leader in 5G'.

