

BT's fibre broadband roll-out





£2.5bn investment to bring "superfast" fibre broadband to around two-thirds of UK premises by the end of Spring 2014

Already available to more than 18 million homes and businesses

- A mixture of fibre to the cabinet (FTTC) and fibre to the premise technology (FTTP)
- Starting to make FTTP available "on demand" within our FTTC footprint
- Through partnerships, we believe we can extend fibre broadband to more than 90% of UK premises. We're prepared to commit substantial additional funds to achieve this.
- Also 5m BT WiFi hotspots throughout the UK



No other company in the world is investing as much in fibre without public sector support or a regulatory regime that allows for far greater returns

... In an open way

Our open network brings competition, choice & low prices

























Connecting Devon and Somerset



The Case for Action:

• If left to private sector alone, some 360,000 premises including 26,000 businesses with a combined turnover of £9 billion have no certainty of receiving improved or superfast broadband in the next three year period.

*based on Ofcom and CDS Demand Registration Survey data













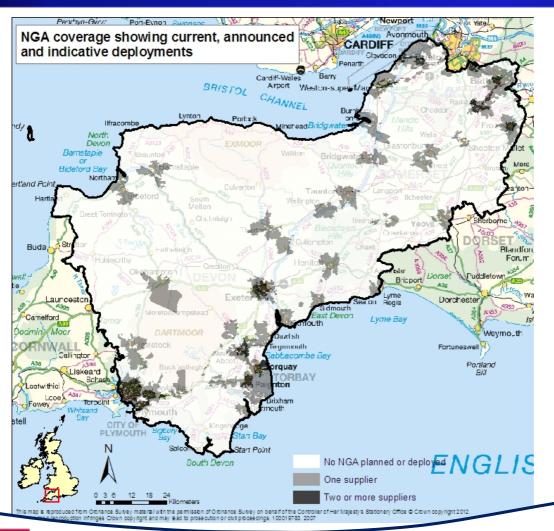




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Historic
Devon and
Somerset



- 965,000 premises in total*
- 360,000 not in commercial deployment area*
- 6% of total premises below 2Mbps*

*from CDS Call-Off ITT Part 2

NGA: Next Generation Access

















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Investment:

How much?

- £21m Local Authority (Devon, Somerset and B&NES)
- £32m Central Government
- £41m BT
- Business/community engagement funded by CDS with support from BT

Why Invest?

- Greatest step change to support economic growth
- Lack of adequate broadband cited as greatest barrier to growth for businesses in Devon and Somerset - 81% of businesses require faster broadband*
- 91% residents state they need improved connections*

* Based on responses to CDS' Demand Registration Survey

















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What are we delivering:

- Around 90% of premises covered by superfast (>24Mbps) broadband – this programme and plans of private sector
- 100% coverage of at least 2Mbps broadband for all premises in the programme area
- Plus support for businesses and communities to make best use of broadband

All by end of December 2016

















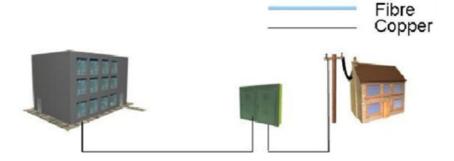
Technology

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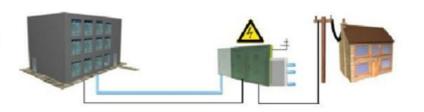
ADSL Broadband

Copper from the exchange to the premises.



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

















Building at Scale

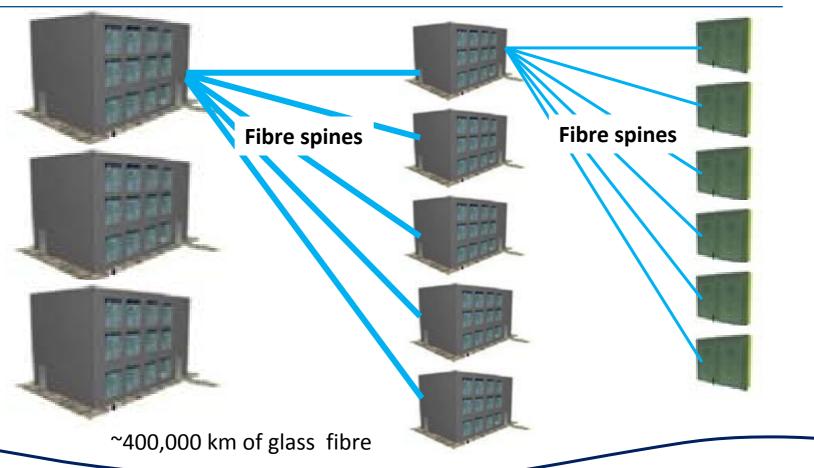
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Head-end exchanges (~50)

Child exchanges (~250)

Cabinets (~1500)



















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Approach and Technology Challenges

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- Existence/condition of existing infrastructure, particularly ducts
- Costs and timings vary according to the type and quantity of infrastructure required
- Power requirements for cabinets existing street cabinets don't require power, fibre street cabinets do and in rural areas this is more likely to be overhead
- Power requirements for Head-ends
- Broadband performance reflects proximity to existing cabinets
- Road closures more likely in rural areas as roads tend to be narrower
- Securing wayleaves e.g. for FTTP in multi-dwelling units
- Key relationships: Western Power, Highways and Planning Depts













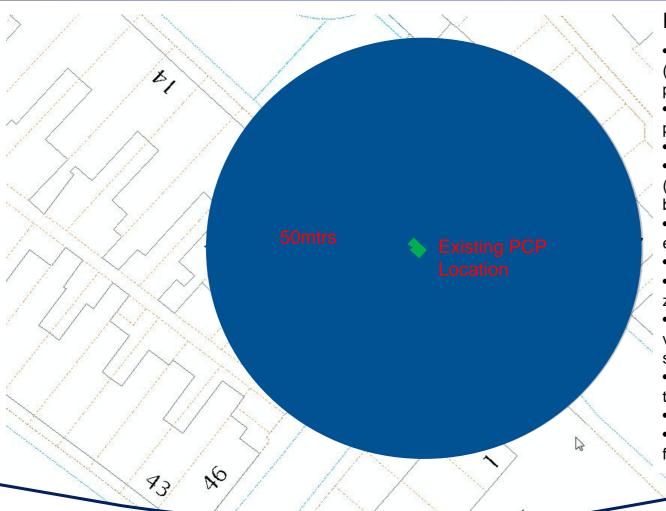




Approach and Technology Cabinet Positioning

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Planning Rules:

- •PCP & DSLAM <50mtrs apart (exceptionally 100mtrs) – Broadband performance issue
- Sited to allow cost effective access to power supply
- •Not in a flood plain area
- Positioned outside restricted areas (e.g. areas of outstanding natural beauty) where possible
- •Access to footpaths, drives, fire exits etc. not blocked by open doors
- Avoid private land if possible
- •Avoid close proximity of road junctions, zebra crossings, road signs, etc.
- •Avoid household issues such as visibility from main window, stepping stone across boundaries, etc.
- •Plinth not positioned over UG services, tree roots, etc.
- •100mm clearance behind unit
- Required spacing to other street furniture













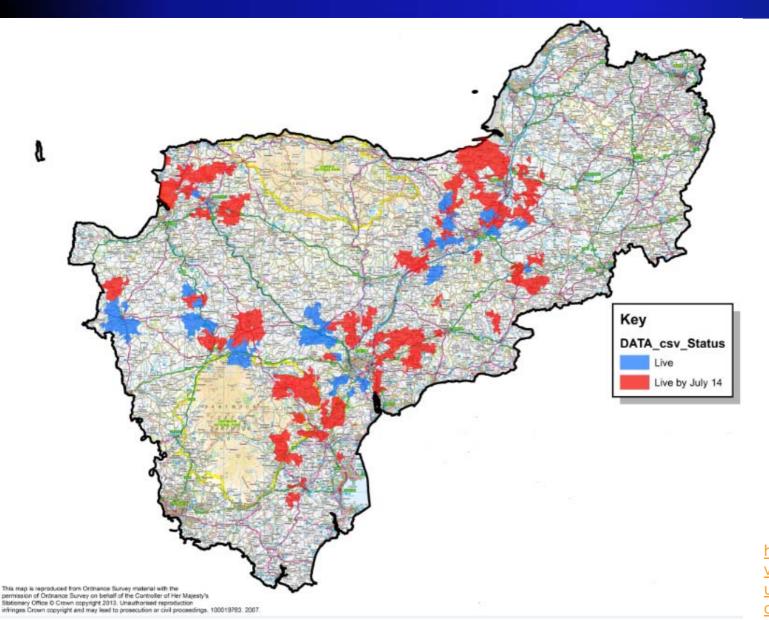




Post survey build map

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http://www.connectingde vonandsomerset.co.uk/c urrent-infrastructuredeployment/