

# Superfast Cornwall Evaluation

## Final Evaluation Report: Executive Summary

June 2015



Buckman|Associates|Ltd

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# Superfast Cornwall Evaluation Final Report

## Executive Summary

### 1. Introduction

The Next Generation Broadband (NGB) Infrastructure project, known as Superfast Cornwall, had an initial target to make fast, fibre based broadband available to at least 80% of homes and businesses in Cornwall – this was subsequently extended to 95% of premises by the end of March 2015. A total of £53.5m of funding was provided by the European Regional Development Fund (ERDF) in the roll out of the project, making it the largest single Convergence investment, while an additional £78.5m was invested by BT. The project aimed to have a real economic transformation and leave a long term legacy for Cornwall and the Isles of Scilly.

The evaluation of the Superfast Cornwall project was led by CDC's Research and Evaluation Manager. A team led by SERIO and including experts from across Plymouth University, in collaboration with Buckman Associates, was commissioned to provide objective external expertise to ensure that the evaluation is objective and transparent, and reflects best evaluation practice. The evaluation was undertaken using a range of different methods including:

Tool	Description
Omnibus Business Survey	A random telephone survey with 460 businesses that had connected to superfast broadband for 12 months or longer.
Longitudinal Business Survey	A follow-up survey with 50 businesses, identified through the omnibus, to enable tracking in changes of business use and benefits over time.
Counterfactual Business Survey	A telephone survey with a random sample of 411 businesses that had not connected to superfast broadband in Cornwall.
Business Take-up Survey	A random telephone survey of businesses taking place at the end of the roll out period to establish take up.
Consumer Survey	A quarterly telephone survey with a random sample of 887 consumers (468 that had been connected for 6 months or more, and 419 that had not upgraded to superfast) to establish the social and economic impacts of superfast broadband.
Stakeholder Interviews	A total of 64 interviews held with Cornish stakeholders to explore perceptions of the project and its impact.
Counterfactual Stakeholder Interviews	Interviews with seven stakeholders in three comparator areas (Devon, North Yorkshire, and Lincolnshire) to inform the assessment of the counterfactual.

One of the factors that differentiates this research from some other comparable studies is the assessment of the counterfactual. This allowed the researchers to assess what would have happened in similar economies with similar baseline levels of coverage but without the level of investment that Cornwall and the Isles of Scilly has received. In other words, the assessment of the counterfactual enabled the study to attribute change in the Cornish economy to the Superfast Cornwall programme.

This report, delivered by the external evaluation team, provides a robust assessment of impact based upon an extensive body of primary research that yielded high response rates from participants. As such, the reader should have confidence that the data presented represents a true reflection of actual impact.

## 2. Strategic Context

The economic, social and environmental benefits of NGB have been cited previously in a number of research studies. It is therefore not surprising that developing NGB infrastructure has become a key priority for policy-makers both in the UK and elsewhere. The focus of the EU's 'Digital Agenda for Europe' on developing a "single digital market" may enable Cornish businesses to further utilise the high-speed of their connections and develop new export opportunities. Similarly, the new focus on public sector innovation, eHealth and cloud computing may provide opportunities for further investment in Cornwall.

Conversely the focus of the EU on higher internet speeds and mobile infrastructure underlines both the need for Cornwall and the Isles of Scilly to continue to develop its digital infrastructure, and for it to maximise its competitive advantage before other areas obtain the same level of connectivity.

## 3. Infrastructure Roll-out and Take-up

The original project target, for superfast broadband to be available to 80% of the 253,000 premises in Cornwall by the end of 2014, was extended to 95% of premises due to efficiency gains and high take-up<sup>1</sup>. Data from BT shows that by March 2015 this extended target had been exceeded with a total of 241,000 premises having been passed<sup>2</sup>. This gives the county the second best coverage, after Japan, of the 13 comparator areas assessed by Analysys Mason in their 2015 Benchmarking report<sup>3</sup>.

As the roll-out has progressed, take-up has steadily increased and reached 66,537 connected premises in June 2015. While precise figures for the number of businesses connected is not available, estimates derived from the March 2015 take-up rate for premises overall, alongside ONS data, suggests that a total of 12,104 businesses were connected as of March 2015.

## 4. Business Benefits

Findings from the business omnibus and counterfactual surveys suggest that connected businesses have exploited superfast to enhance their usage of the internet. Usage amongst connected businesses was higher than for non-connected businesses for a range of pre-specified internet functions (such as cloud computing, and video conferencing). Furthermore a majority of connected businesses reported an increase in usage of each function since upgrading to superfast.

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<sup>1</sup> NB: The 253,000 premises was a baseline contract figure that excluded the area of Saltash (which was out of scope due to the presence of a second infrastructure in Virgin Media) and any new builds that came on-line since the start of the programme in 2010 (approximately 2,200 per annum).

<sup>2</sup> NB: The final coverage figure is expected to be 258,000 in June 2015.

<sup>3</sup> Analysys Mason was commissioned by CDC to conduct a benchmarking analysis of the anticipated Superfast Cornwall network in March 2015 against 12 comparator areas. Ref: Analysys Mason (2015) Benchmarking the Superfast Cornwall Landing Point.

Approximately four in every five connected businesses (79.1%) perceived superfast to be beneficial overall. Key findings indicated that:

Superfast broadband had:	Percentage of Respondents
Saved the business time and/or money	79%
Allowed employees to work remotely and/or more efficiently from home	71%
Enabled the business to work in new and different ways	56%
Allowed the business to grow	56%
Helped the business to develop new goods and services	47%

In addition, 49% of businesses indicated that superfast had helped them to generate new sales or access new markets and, of these, nearly two thirds (62.3%) indicated that these markets were national or international. Several stakeholders were also able to point to cases where superfast had been used by Cornish businesses to access international markets.



Photo: Superfast Cornwall 'sign-post'

## 5. Economic Benefits

Superfast appears to have brought considerable economic advantages to connected businesses. **Average turnover rose by an estimated £90,848 per connected business compared to just £20,922 amongst non-connected businesses** over the last two financial years. Similarly average gross job creation amongst the connected businesses was 0.63 FTE compared to just 0.45 amongst non-connected businesses.

Table i displays estimates for overall economic impact derived from the business omnibus and consumer surveys. This includes calculations of:

- **Gross Increase:** The overall increase in Gross Value Added (GVA) and jobs amongst connected businesses;
- **Attributable Increase/Safeguarded:** The increase in (or safeguarding of) GVA and jobs amongst connected businesses or business start-ups which is attributed to the Superfast Cornwall project (i.e. it would not have happened without the project); and,
- **Net Increase:** The increase in (or safeguarding of) GVA and jobs amongst connected businesses or business start-ups which is attributed to superfast after both negative (displacement) and positive (the multiplier) impacts on other businesses in Cornwall are taken into account<sup>4</sup>.

**NB:** GVA is calculated through converting each job created or safeguarded into GVA using the average GVA per FTE figure for businesses in Cornwall within the sector the job is based in. This means that it excludes any GVA as a result of productivity gains where businesses do not increase their FTE headcount. Conversely where a business does increase its employment the assumption is that there is no change in productivity per FTE.

Within this framework, estimates were calculated for the following groups of businesses and associated timelines<sup>5</sup>: All established businesses connected to superfast for 12 months or more; all established businesses connected; all business start-ups connected to superfast for 12 months or more; and all business start-ups connected.

Based on the assumption that the sectoral take-up of superfast broadband in the omnibus survey reflects that of the 5,905 businesses connected for 12 months or more<sup>6</sup>, **an estimated 1,079 new net FTE positions were attributable to superfast. This equates to £61.3m in net GVA.**

Superfast also played an important role in encouraging business start-ups. Of the 468 consumer survey respondents, 9.6% (45) had set-up a business, of whom 12 indicated that superfast had influenced them to do this (including seven start-ups). In addition 7.1% (33) indicated that another household member had set-up a business. Based on the assumption that these findings on start-ups reflect the trends amongst wider population of 43,301 households connected for over 12 months, **an estimated 946 net FTE can be attributed to superfast, equating to £30.5m of net GVA.** All key estimates for economic impact are included in Tables i and ii.

Combining the net figures from established businesses with those from business start-ups, **an estimated 2,025 net FTE in total can be attributed to superfast, equating to £91.8m in net GVA.**

<sup>4</sup> See Section 5.3.7 of the main report for more information on how this is calculated. The net figures do not include an adjustment for leakage as this is already factored into the gross figures, while substitution is not considered applicable.

<sup>5</sup> Given that it takes time for superfast to make an impact on business performance the figures for businesses connected for 12 months or more provide the best indication of impact at the time of reporting. However as it is likely that newly connected businesses will report similar levels of impact in the future, the figures for all businesses connected provide a useful indication of what the overall impact of superfast is likely to be 12 months from the time of the report.

<sup>6</sup> This figure is based on the estimated number of business premises connected (assumed to be 12% of the 49,206 connections) at June 2014. In contrast, the estimate for total businesses connected accounts for the number of Cornish businesses (including businesses based at home), that are unregistered. The figures for FTE and GVA created through business start-ups are grossed up to the number of households connected for over 12 months to reflect the fact that these are not yet established businesses.

**Table i: Economic Impact of Superfast in Terms of Jobs and GVA (June 2015)**

Objective	Connected for 12 Months or More as at June 2015	
	Jobs (FTE)	GVA
<b>Connected Established Businesses</b>		
Gross Increase amongst Connected Businesses	3,727	£131,168,605
Attributable Increase amongst Connected Businesses	1,072	£60,906,165
Net Increase amongst Connected Businesses	1,079	£61,286,829
Attributable Safeguarded amongst Connected Businesses <sup>7</sup>	2,452	£93,707,526
Net Safeguarded amongst Connected Businesses	2,468	£94,293,198
<b>Business Start-ups</b>	<b>Jobs (FTE)</b>	<b>GVA</b>
Attributable Increase through Business Start-Ups	940	£30,339,485
Net Increase through Business Start-Ups	946	£30,529,107
<b>Combined Total</b>	<b>Jobs (FTE)</b>	<b>GVA</b>
Gross Total Increase <sup>8</sup>	4,666	£161,508,090
Net Increase	2,025	£91,815,935

**Table ii: Projected Economic Impact of Superfast in Terms of Jobs and GVA (by June 2016)**

Objective	All Connections for 12 Months or More projected at June 2016 <sup>9</sup>	
	Jobs (FTE)	GVA
<b>Connected Established Businesses</b>		
Gross Increase amongst Connected Businesses	5,039	£177,367,912
Attributable Increase amongst Connected Businesses	1,450	£82,358,117
Net Increase amongst Connected Businesses	1,459	£82,872,856
Attributable Safeguarded amongst Connected Businesses <sup>7</sup>	3,316	£126,712,548
Net Safeguarded amongst Connected Businesses	3,337	£127,504,502
<b>Business Start-ups</b>	<b>Jobs (FTE)</b>	<b>GVA</b>
Attributable Increase through Business Start-Ups	1,271	£41,025,450
Net Increase through Business Start-Ups	1,279	£41,281,859
<b>Combined Total</b>	<b>Jobs (FTE)</b>	<b>GVA</b>
Gross Total Increase <sup>8</sup>	6,310	£218,393,362
Net Increase	2,738	£124,154,715

Data collected from other sources revealed that superfast has also made an economic impact in other ways besides jobs and turnover growth. The longitudinal business survey found that productivity (as measured by GVA per FTE) increased by 30% amongst the 22 businesses providing data, since they upgraded to superfast. In addition, both the longitudinal business, and the stakeholder surveys point to the role of superfast in helping to encourage some businesses to relocate to Cornwall. This is exemplified by the experience of KEO Digital.

<sup>7</sup> Jobs and GVA figures for start-ups were only recorded where a respondent was influenced by superfast to set-up a business as opposed to whether they already had superfast at the point of setting-up the business. Consequently gross figures are not recorded for business start-ups. Similarly no safeguarded figures are recorded as safeguarding is not applicable in the case of businesses set-up under the influence of the project.

<sup>8</sup> As there is no gross figure for business start-ups (see footnote 7) figures for gross jobs and GVA creation are based on combining the pure gross figures from the business omnibus survey with the attributable figures for the business start-ups.

<sup>9</sup> NB: This is based on the total number of connections at June 2015. This assumes that none of these businesses will disconnect from superfast within the next twelve months.

### KEO Digital – ‘Key factor in relocating’



**KEO digital** is the multi award-winning team behind River Cottage, Fish Fight, Chicken Out!, Landshare, energyshare, and crowdfunder.co.uk. Across the KEO family, there are over 2 million registered users, whilst over 50 million people watched a KEO films programme last year.

In November 2012 KEO digital moved the digital production arm of its business from London and Bridport to Newquay to create a new innovation hub. Superfast broadband was

one of the factors that facilitated the move to Cornwall. Communications Manager Jess Ratty says: "As a digital business, superfast connectivity is vital to us. The fact that superfast broadband was in Newquay was an important factor in the decision to relocate to Cornwall. We simply could not run our digital business effectively without superfast connectivity. Because superfast broadband is available to us in Cornwall, we can now run a world class digital business here and all enjoy the benefits of living and working in such a beautiful and inspirational county" (Case study: November 2013).

## 6. Cross-cutting Themes

As with the businesses, levels of internet usage amongst the fibre connected households were higher than for non-fibre connected households across a range of internet functions, encompassing e-government, education, retail, health and entertainment. However a majority of connected respondents had used each internet function under investigation before upgrading to superfast, suggesting that the project has not had quite as much of an impact on consumer behaviour as it has had on businesses.

Research by BT found that the carbon abatement potential of the project far outweighs the carbon impact, suggesting that it has the potential to bring considerable environmental benefits. In addition, the longitudinal business survey found a reduction in business travel amongst some businesses after upgrading, whilst the consumer survey found that superfast was an important factor in the decision of some participants to work from home more.

## 7. Strategic Added Value

Feedback from the stakeholder survey suggests that the project has performed a key leadership role in such areas as influencing the roll-out of superfast broadband nationally, and informing the policy of the Cornwall and Isles of Scilly Local Enterprise Partnership. The project has also helped lever additional investments in digital inclusion work (the Get IT Together and Inspiring Work project), and research development (the Superfast Cornwall labs). However, whilst Superfast Cornwall was able to develop links with other business support projects, the absence of broader coordination of business support in Cornwall prevented deeper synergies.

The successful roll out of superfast broadband enabled the development of the ‘Superfast Business Cornwall’ Business Support programme (SFBC). This ERDF funded programme provided a small cohort of 30 high growth businesses with intensive support to maximise the opportunities presented by Superfast Broadband and its technologies. Participating businesses were provided with intensive support and grant funding to develop and implement a transformational ICT project.

## 8. Conclusions and Recommendations

This report, which marks the culmination of the evaluation of the largest single European investment in superfast broadband, shows how Cornwall has taken a lead in the roll-out of superfast broadband in a predominantly rural area. This section of the Executive Summary summarises the performance of the project against its targets and makes recommendations for consideration by CDC and relevant stakeholders. **NB:** These are expanded upon in the main body of the report.

### Performance Against Targets

Table iii outlines the achievements of the project against its targets. As shown, the project has overachieved against its targets in terms of businesses connected, gross increases in jobs and GVA, and GVA safeguarded. This demonstrates that as well as exceeding its target for coverage, the project has also made a positive contribution to business growth and job creation. These impacts are especially noteworthy given that the roll-out of the project occurred in an economic context where survival, as opposed to growth, was still the primary focus for many businesses.

**Table iii: Project Targets and Achievements (June 2015)**

Objective	Target	Achieved	% Achieved
Businesses benefitting from upgraded ICT infrastructure	10,000	12,104	121%
Businesses with improved performance (GVA) <sup>1</sup>	6,000	4,686	78%
Gross increase of jobs <sup>1</sup>	4,000	4,666	117%
Net additional increase in jobs <sup>1</sup>	2,835	2,025	71%
Net jobs safeguarded <sup>1</sup>	2,000	2,468	123%
Gross increase in GVA <sup>1</sup>	£140.0m	£161.5m	115%
Net additional GVA <sup>1</sup>	£99.2m	£91.8m	93%
Net additional safeguarded GVA <sup>1</sup>	£70.0m	£94.3m	135%

<sup>1</sup>These estimates are based on the number of premises connected for 12 months or more at June 2015.

Whilst the project has not yet reached its targets in terms of net jobs and GVA created, and businesses with improved performance<sup>10</sup>, estimates based on the number of businesses connected at June 2015 suggests that it will more than surpass these targets within the next 12 months (see Table iv). The one exception to this is net additional jobs, which is projected to reach 97% of target by June 2016<sup>11</sup>.

<sup>10</sup> The figure for businesses with improved performance was estimated from the proportion (%) of businesses indicating that superfast had saved them time and or money (see page ii). This assumes that a business saving time/money will be demonstrating improved performance which will in turn result in improved GVA. The methodology used for calculating GVA was based on increases in employment/safeguarded jobs and was not sufficiently granular as to be able to pick up marginal GVA improvements likely to be seen from businesses saving time or money. Therefore it has not been possible to confirm that businesses saving time/money have also achieved GVA improvements.

<sup>11</sup> These estimates assume that there are no overall differences between the businesses which connected to superfast in the last 12 months and those that had upgraded to superfast prior to that point.

**Table iv: Project Targets and Projected Achievements (by June 2016)**

Objective	Target	Achieved	% Achieved
Businesses benefitting from upgraded ICT infrastructure <sup>1</sup>	10,000	-	-
Businesses with improved performance (GVA) <sup>2</sup>	6,000	6,337	106%
Gross increase of jobs <sup>2</sup>	4,000	6,310	158%
Net additional increase in jobs <sup>2</sup>	2,835	2,738	97%
Net jobs safeguarded <sup>2</sup>	2,000	3,337	167%
Gross increase in GVA <sup>2</sup>	£140.0m	£218.4m	156%
Net additional GVA <sup>2</sup>	£99.2m	£124.2m	125%
Net additional safeguarded GVA <sup>2</sup>	£70.0m	£127.5m	182%

<sup>1</sup>Estimates for this objective are based on ONS Business Demography which is updated annually. Consequently no projected figure is available.

<sup>2</sup>These estimates are based on all premises connected at June 2015.

## Recommendations

### *Infrastructure Improvements*

Whilst much of the focus of future policy needs to be on capitalising on the existing infrastructure, we recommend that policy-makers also **consider potential improvements, where needed, both to enhance the equitability of provision, and to ensure that the county continues to have cutting edge technology.**

### *Accomplishing Full Coverage*

It will be important to ensure that coverage is rolled-out to the remaining 5% of premises that are not able to connect to fibre broadband (and the estimated 11% who are not connected to 24+ Mbps superfast). This process is likely to be particularly challenging logistically and it will therefore be important to consider the feedback of some stakeholders regarding the management of expectations. Consequently it is recommended that continued efforts are made to **ensure that residents, businesses and stakeholders are kept fully informed regarding the movement toward additional coverage and provided with realistic timescales.**

### *Improving Take-Up*

It is recommended that work, in collaboration with the internet service providers, continues to **ensure that consumers and businesses are increasingly aware that they can connect to superfast** or, if there are localised coverage issues, why they cannot. In addition it is recommended that the LEP and business support organisations **consider approaches to highlight the potential benefits that superfast can provide to businesses outside the digital sector.**

### *Business Support*

Whilst the findings present a promising picture of business use, future efforts to encourage businesses to capitalise on their superfast connections could be useful. Given the challenges of developing synergies between the project and other business support providers, it is recommended that the LEP and CDC **consider how existing and future business support services can best utilise superfast as a tool for business improvement.** This should be part of a broader effort to strengthen the coordination of business support in the county.

### ***Inward Investment***

Inward investment provides an important means of capitalising on the superfast infrastructure. **It is therefore recommended that the work already undertaken by Invest in Cornwall to utilise superfast to help encourage inward investment is continued.** However, as some stakeholders have pointed out, superfast can only form part of a package of potential inducements for businesses to relocate.

### ***Digital Inclusion***

In light of the value placed on it by stakeholders, and in the context of the increased digitisation of government services it will important to continue the digital inclusion work undertaken through superfast. **We understand that partners have highlighted this as part of the next EU Programme and we recommend that funding is provided for such a project.**



*Photo: BT Openreach engineer in Zelah, Cornwall*



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