**Superfast Cornwall Evaluation Plan: 2016 - 2022**

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# Project summary

Following on from the 2011-15 Superfast Cornwall programme (which covered approximately 238,000 premises at 24+Mbps superfast speeds , the first part of the new programme aims to cover 8,000 24+Mbps premises by the end of 2017. The second phase, which will be a part-EU funded programme with the working title ‘Superfast 2’, will run between 2017-2020 and include a further estimated 8,000 premises (subject to a procurement outcome), allowing them to connect to superfast broadband. The aim of this evaluation is to assess the economic impacts of superfast broadband in Cornwall, building on the 2011-2015 programme. Therefore the on-going impact of the original programme will be assessed alongside the new areas.

# Economic impact

The estimated economic impact to be achieved by March 2022 from both phases of the project is shown below. The estimates are based on the methodology established and results achieved in the previous programme (by the 2015 Superfast Cornwall evaluation), which are then applied to the estimated number of businesses that will connect during this project.

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| --- | --- |
| Number of gross jobs created | Gross: 777 Net: 337 |
| Number of jobs safeguarded | 411 |
| GVA created | Gross: £26,881,910 Net: £15,282,130 |
| GVA safeguarded | £15,694,454 |
| Number of businesses covered | 28801 |
| Number of ERDF eligible businesses covered in 2017-2020 ‘Superfast 2’ | 12002 |
| EU Cross cutting themes in the 2017-2020 ‘Superfast 2’ programme |  |

# Notes

1. Calculated as 18% of 16,000 premises to allow for registered and unregistered businesses (total estimated in Cornwall is 50,000 as per Superfast Cornwall evaluation)
2. The 1440 figure for Superfast 2 is reduced to 1200 to allow for ERDF ineligible businesses e.g. primary producing farms

# Evaluation Milestones and Timescale

*Milestone 1 – Jan 2017*

* Baseline summary report using overall take-up figures to estimate current businesses connected and economic impact data

*Milestone 2 – March 2018*

* New survey data to be collected from businesses in established areas (100)
* New survey data to be collected from households in established areas (100)
* Longitudinal business survey update (ideally with original businesses) (30)
* Businesses connected and economic impact data for established areas to be estimated

*Milestone 3 – March 2019*

* Business data to be collected from new and established areas (15+1405)
* Household data to be collected from new and established areas (34+140)
* Longitudinal business survey update (30)
* Businesses connected and economic impact data for new and established areas to be estimated (broken down into new area and total area)
* To provide data required for RGF outputs

Milestone 4 – March 2021

* Business data to be collected from new and established areas (105+140)
* Household data to be collected from new and established areas (238+140)
* Longitudinal business survey update (30)
* Businesses connected and economic impact data for new and established areas to be estimated (broken down into new area and total area)
* To provide data for Growth Deal outputs and also for the ‘Superfast 2’ programme
* Key output to be measured for ERDF Superfast 2 programme is ‘eligible businesses covered’ (methodology TBD).
* Cross cutting themes outputs will be measured for the ERDF Superfast 2 programme

# Logic chain

**Inputs**

BDUK funding

Private sector investment

Cornwall Council investment

Regional Growth Fund

Growth Deal

EU funding

CDC delivery management team

**Activities**

Install superfast broadband infrastructure - fibre to premises, fibre to cabinet, satellite etc

Communicating the benefits to business

**Outputs**

2,880 businesses benefitting from upgraded ICT infrastructure (including 1200 ERDF businesses for Superfast 2)

Good overall

take-up

Good and consistent network performance

Excellent customer satisfaction

**Outcomes / Results**

777/411 jobs created/safeguarded

£27m gross increase in GVA

£16 additional safeguarded GVA

Innovation and R&D outcomes

Positive environmental benefits - flexible working/ access to work and services

Attractive environment for inward investment

**Impacts**

£15m net additional GVA

337 net additional jobs

Environmental impact (reduction in CO2) – reduced travel, energy use, waste etc

**Objectives**

Build on the existing superfast broadband network to connect a further 16,000 premises.

Continue to transform Cornwall’s economy by providing a superfast broadband network for high growth, high value businesses to increase productivity, innovation, collaboration and global opportunities

**SAV**

Research and innovation

Business support

**SAV**

Strategic leadership

Influence and engagement

# Evaluation Methodology

## Overall Approach

The evaluation methodology used will be similar to that employed for the 2011-2015 evaluation programme for Superfast Cornwall. This will ensure that the data collected is comparable and data from both evaluations can be used to assess the overall impact of superfast broadband in Cornwall. The 2015 Superfast Cornwall evaluation was ground-breaking, as it was the first time that detailed net economic impacts arising from the superfast broadband technology have been assessed in a rural area and as such is an important baseline for assessing the long-term impacts of this technology. The new programme will allow for further evaluation work to be carried out to continue to assess these impacts, particularly in remote areas.

DCLG have provided guidance on how to assess ERDF-eligible SMEs and eligible network build. DCLG require the demonstration of an additional 1,200 individually identifiable eligible SMEs provided with broadband access of 30+Mbps via infrastructure funded by the project. Through the evaluation surveys, it will be possible to provide evidence of some of these eligible SMEs, both for connected businesses (who participate fully in the economic impacts survey) and also for currently non-connected businesses that are nevertheless covered by the technology.

In order to ensure independence, an impartial evaluator will be appointed to oversee both the evaluation itself and the collection of the raw survey data (as there is no Evaluation or Programme Manager to oversee the data collection process separately), although sub-contracting the survey work will be encouraged to ensure cost-efficiency. The evaluators will be responsible for the overall project management of the evaluation, data verification, updating the evaluation plan and survey tools as well as undertaking the milestone reporting.

## Baseline Summary Report

The first task required of the evaluators will be to write a baseline summary report, which will build on the 2015 Superfast Cornwall evaluation. The evaluators will use overall take-up figures to estimate current business take-up and economic impacts (jobs and GVA) and no new raw data will be collected at this stage. The evaluators will also be required to review the evaluation plan to ensure that it is fit to deliver the required milestones.

## 2018 Evaluation Report

This will be the first report where the evaluators are required to undertake primary research from businesses and households in order to collect data to assess economic impacts. New survey data will be collected from businesses and households in established areas (superfast broadband technology delivered in the 2011-2015 project). These surveys will sample the ‘businesses connected’ population to see whether there has been any performance improvements (GVA measured through turnover or jobs) or jobs created/safeguarded. The sampled data will then be ‘grossed up’ to give an indication of the impact at the population level in the established areas.

A total of 100 businesses and 100 households will be surveyed at this stage, with a caveat that the businesses must have been connected to superfast broadband for at least 12 months and households for 6 months. This is to ensure that any improvements in productivity or other benefits from superfast broadband can begin to show. The sample size for this milestone is based on the overall sample size that needs to be achieved at the end of the programme to be statistically significant at the 95% confidence interval, plus or minus 5%. It is assumed that 12,100 businesses (total population) are connected to superfast broadband in the established area as of June 2015 (according to the 2015 evaluation), and 373 businesses would need to be included in the sample to be statistically significant. It is suggested that 100 businesses are sampled for the 2018 report and then a further 140 in 2019 and another 140 in 2021 to give a total of 380. The same number of households will also be surveyed, which will give a similar statistically significant output. The 100 businesses surveyed in 2018 will be statistically significant at the 95% confidence interval, plus or minus 10%[[1]](#footnote-1).

Both surveys will be based on the questionnaires used for the 2015 evaluation (the questionnaires were created by the Evaluation Manager and are freely available for use in this evaluation) to ensure comparable data is collected. These cover questions to assess the economic impact to date but businesses will also be asked about future impacts and how long they foresee the benefits lasting. This is important as there is often a time-lag between project expenditure/activity and economic impact being achieved. In the previous 2011-2015 evaluation, a business counterfactual survey was also carried out. It is not suggested that the counterfactual survey is repeated for this evaluation, but the questionnaires may need to be reviewed to include a couple of additional questions to help to assess the counterfactual e.g. what would the business have done in the absence of superfast broadband and how might that have affected jobs and turnover.

The questionnaires will also need to include updated questions to ensure that adequate data is collected to provide the SME eligibility requirements from DCLG. For connected businesses that participate in the full survey, this data will automatically be collected. However, in the screening process, a few additional questions will need to be included for businesses that are not currently connected to superfast broadband (or have been connected for less than 12 months) but are still covered by the technology and are eligible SME outputs for DCLG. The data that will need to be collected will include name of business, postcode and sector and it is envisaged that 100 businesses will be identified in this manner.

To cover the obligations of the EU funding in relation to Cross Cutting Themes, a percentage of the businesses in the survey will be asked a couple of additional questions about environmental impact (whether businesses are benefitting from reduced travel and energy costs and therefore a reduction in carbon GHGs) and others will be asked about equality and diversity (to provide quantitative data on gender, ethnic diversity groups and disabled people based on business ownership). Care will be taken in the survey to ensure that an appropriate person is contacted that can answer questions about turnover, jobs and the impacts of superfast broadband. There is not a list of businesses connected from which to sample and therefore sampling would need to be carried out using a list of all businesses in the established area with an initial question to find out whether the business has connected to superfast broadband.

As only businesses in the established area can be surveyed at this stage, it is suggested that within the sample the evaluators try to target a sub-set of businesses that can be said to have similar characteristics to those in the new areas. The characteristics to focus on could include business size and distance to the exchange, as businesses in the new areas are likely to be more remote. This will allow some conclusions to be drawn about possible impacts for the businesses in the new area.

The longitudinal business survey will also be repeated in established areas, ideally using 30 of the same 50 businesses as in the 2015 evaluation report (although this will need to be discussed with the appointed evaluators and will depend on whether the business list is available). This survey aims to collect data to capture the qualitative impacts over time from superfast broadband. It is expected that businesses will become more innovative and producers of superfast broadband-enabled content as a consequence. An in-depth longitudinal survey will allow the business experience to be tracked over time. This will also allow a deeper probing around some of the key issues relating to economic impact (e.g. it will enable the tracking of changes in turnover and employees numbers over time) allowing the other business survey to be kept short. The businesses involved reflect a range e.g. high growth/high value businesses and key sectors.

If resources allow, a stakeholder survey will also be carried out by the evaluators. The stakeholder survey will explore the strategic added value activities and outcomes such as research and innovation, skills, business support, inward investment, environmental impacts and digital inclusion. Key regional and national stakeholders will also be interviewed to gather opinions on how the programme as a whole has performed and achieved its objectives.

## 2019 and 2021 Evaluation Reports

The next two reports will contain similar business and household surveying in the established areas as for the 2018 evaluation report, although the total number of businesses and households surveyed will be increased to 140 for each report, giving a total of 380 businesses surveyed (statistically significant at the 95% confidence interval, plus or minus 5%) by the end of the evaluation programme.

In addition, there will be some business and household surveying for the new areas as well. The questionnaires used for the surveying will be identical to those used for the established areas, so that the data collected is comparable. The following table shows the target number of surveys to be completed for each phase in the new area (assuming 10% are surveyed and that the businesses have been connected for at least 12 months) based on the businesses connected projected take-up figures. For example, 143 businesses will have been connected by Dec 2017 and therefore 14 (10%) can be surveyed 12 months later in Dec 2018. The highlighted rows show the actual years that surveying will be carried out; these are Dec 2018 for the March 2019 report and Dec 2020 for the March 2021 report. Surveying could also be carried out in Dec 2019 if resources allow.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| BDUK phase | Cumulative businesses | Cumulative businesses surveyed | ERDF phase | Cumulative businesses | Cumulative businesses surveyed | TOTAL businesses surveyed |
| Dec 2016 | 15 |  | Dec 2016 |  |  |  |
| Dec 2017 | 143 | 2 | Dec 2017 | 7 |  | 2 |
| Dec 2018 | 432 | 14 | Dec 2018 | 108 | 1 | 15 |
| Dec 2019 | 721 | 43 | Dec 2019 | 325 | 11 | 54 |
| Dec 2020 | 1010 | 72 | Dec 2020 | 614 | 33 | 105 |

If the total connected businesses for both phases are considered together, a total of 1,046 businesses will have been connected by Dec 2019 allowing 105 to be sampled by Dec 2020. If a statistically significant result is required (at the 95% confidence interval, plus or minus 5%), then a total of 282 businesses will need to be surveyed. However, it is believed that this figure would be very difficult to achieve and a 10% level of surveying is suggested, which would give a lower statistically significant result (95% confidence interval, plus or minus 9%). It is suggested that the appointed evaluators review the sample sizes and make any adjustments needed, particularly if higher samples can be achieved.

The following table shows the target number of surveys on households to be completed for each phase in the new area (using a 5% sample rate) based on the overall projected take-up figures. The highlighted rows show the actual years that surveying will be carried out; these are Dec 2018 for the March 2019 report and Dec 2020 for the March 2021 report. Surveying could also be carried out in Dec 2019 if resources allow.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| BDUK phase | Cumulative take-up | Cumulative households surveyed | ERDF phase | Cumulative take-up | Cumulative households surveyed | TOTAL households surveyed |
| Dec 2016 | 70 |  | Dec 2016 |  |  |  |
| Dec 2017 | 647 | 4 | Dec 2017 | 33 |  | 4 |
| Dec 2018 | 1958 | 32 | Dec 2018 | 492 | 2 | 34 |
| Dec 2019 | 3269 | 98 | Dec 2019 | 1475 | 25 | 123 |
| Dec 2020 |  | 164 | Dec 2020 | 2786 | 74 | 238 |

If the total connected households for both phases are considered together, a total of 4,744 homes will have been connected by Dec 2019 allowing 238 to be sampled by Dec 2020. If a statistically significant result is required (at the 95% confidence interval, plus or minus 5%), then a total of 356 homes will need to be surveyed. However, it is believed that this figure would be difficult to achieve and a 5% level of surveying is suggested, which would give a slightly lower statistically significant result (at the 95% confidence interval, plus or minus 6%).

As well as the business and household surveys, the longitudinal business survey will be repeated in 2019 and 2012 and also the stakeholder survey (if resources allow).

# Indicative costs

The indicative costs for the evaluation are shown below and the day rate is based on £400 per day.

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| **Evaluation Activity** | **Timing** | **Cost** |
| Baseline report | Jan 2017 | 10 days: £4,000 |
| 2018 milestone report | Mar 2018 | 12.5 days: £5,000 |
| 2019 milestone report | Mar 2019 | 12.5 days: £5,000 |
| 2021 milestone report | Mar 2021 | 15 days: £6,000 |
| Economic impact business surveys | Dec 2017  Dec 2018  Dec 2020 | £12,000 |
| Household surveys | Dec 2017  Dec 2018  Dec 2020 | £12,000 |
| Longitudinal business surveys | Dec 2017  Dec 2018  Dec 2020 | £8,000 |
| **TOTAL** |  | **£52,000** |
| Software tool / methodology to count 1200 ERDF eligible businesses covered | Jan 2018 – Dec 2020 | £10,000 |

## Budget

*BDUK funded 2016-2017 programme – £16,000*

This covers the baseline report (£4,000), 2018 milestone report (£5,000) plus surveys (£7,000)

*ERDF funded 2017-2010 programme - £36,000 + £10,000 software tool / methodology*

This covers the 2019 milestone report (£5,000), the 2021 milestone report (£6,000) plus surveys (£25,000)

+ £10,000 software tool / methodology[[2]](#footnote-2)

## Procurement

There will be a single procurement run for both phases of the evaluation (BDUK and ERDF phases) with the ERDF part being run at risk, until the ERDF funding is secured. This allows a single contractor to undertake the evaluation of both projects in a holistic manner, building on the evaluation from the 2011-15 Superfast Cornwall programme. The procurement will cover both the external expertise and data collection elements. The whole procurement process will be ERDF-compliant. It is expected that a contractor will be appointed by Dec 2016.

1. Sample sizes and tatistical significance calculated using an online calculator: http://www.raosoft.com/samplesize.html [↑](#footnote-ref-1)
2. Not part of the main single procurement [↑](#footnote-ref-2)