

Superfast Extension Programme

Funding Guidance

Document Location

This document is only valid on the day it was printed. The current version of this document can be found on the LARC Huddle site.

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Document purpose

To set out the **context and explain the funding principles and allocations, procurement options, State aid considerations, what is required to access the funding, and the assurance process** for investment of the £250m announced in Spending Round 13 to extend the roll-out of superfast broadband infrastructure across the UK. **It also covers the other requirements that projects will need to meet in order to be eligible for funding.**

1 Overview

This guidance has been prepared as part of the BDUK Superfast Extension Programme (SEP) for investment of the £250m of funding announced in the June 2013 Spending Round, to extend the roll-out of superfast broadband infrastructure across the UK. This guidance sets out the strategic context, explains the funding allocations, the funding approval process, the procurement options, relevant State aid considerations, the assurance process and the other requirements that projects will need to meet in order to be eligible for funding. It also includes a description of the principles that the Government has applied to the allocation of funding, and the process that BDUK will follow to evaluate and approve funding proposals.

The guidance is intended for English Local Authorities and the Devolved Administrations in Scotland, Wales and Northern Ireland (collectively referred to in this guidance as Local Bodies). This guidance is not exhaustive; Local Authorities should also be aware of statutory duties which apply to them, for example, the public sector equalities duty which may be relevant in this context.

2 Strategic Context

Increasing the availability and take-up of superfast broadband is a key driver for enterprise and growth, and therefore remains a high priority for the Government. High speed broadband can have significant benefits for business productivity through, for example, supporting the development of new, more efficient, business models, enabling business process re-engineering to improve the efficiency and management of labour intensive jobs, and enabling increased international trade and collaborative innovation.

Faster broadband also helps to support the creation of new businesses, and easier access to market information helps to reduce barriers to entry. Continual improvements in broadband service offerings, for both business and consumer markets, stimulate innovation in business models, and this serves to improve overall productivity levels in the economy.

Outsourcing of processes and operations is easier for small businesses, which helps them focus on improving their core strengths while reducing operational costs. Superfast broadband can also enable time savings for tele-workers and support increased participation in the labour force.

Extending deployment of superfast broadband in under-served areas can also safeguard employment in areas which would otherwise be at an unfair disadvantage. Superfast broadband also supports inclusion in the digital economy for consumers in rural areas, allowing, for example, greater e-commerce and interaction with public services through digital communications.

To help deliver these benefits Government investment aims to reduce the costs for private investors where the commercial investment case is weak, allowing a commercially sustainable investment case to be made.

3 Funding and objectives

The Government's Rural Broadband Programme already has an aim of delivering availability of superfast broadband with speeds of more **than 24Mbps** to 90% of UK premises and ensuring universal availability of standard broadband with speeds of at least 2Mbps.

In the June 2013 Spending Round the Government announced a further £250m of funding to increase the availability of superfast broadband to 95% of premises in the UK by 2017. There is again a requirement for this funding to be matched by local or European public funding, giving a total of £500m of public funding or subsidy potentially available. All premises not currently expected to have access to superfast broadband through other commercial and publicly-funded programmes are potentially within scope, although in order to achieve 95% coverage it will be important that the most cost-effective investment opportunities are targeted.

Separately in the 2013 Autumn Statement the Government announced a £10m fund to explore with industry how to extend broadband coverage further in the most difficult to reach parts of the UK. Separate guidance for the £10m fund will be provided at the launch of the fund.

3.1.1 Principles for funding allocations

The approach to allocating the £250m funding assumes public subsidy is provided to reduce the costs for private investors allowing a commercially sustainable investment case to be made and is based on the following funding principles.

- i. Local match funding will be required for all allocations, using local or European funding sources
- ii. To ensure a fair allocation to the Devolved Administrations we have allocated on a share of population basis to each devolved nation
- iii. Funding will be made available to local authority areas in England using the partnership groupings adopted for the current Rural Broadband Programme, and on the basis of supporting investments which are not cost-effective to the private sector and to enable 95% of UK premises to have access to superfast broadband
- iv. BDUK will retain some unallocated funding to enable further funding to be provided to areas where there is a good economic case for doing so, subject to match funding being provided.
- v. If any funding is not taken up by Local Bodies, this will be available for redistribution to other areas where there is a good economic case for doing so, subject to match funding being provided.
- vi. BDUK will agree funding bilaterally with projects where current commercial deployment is uncertain.

3.1.2 Data model

BDUK has modelled the gap in superfast broadband services across the UK and has estimated the public subsidy required to reduce the costs for private investors allowing a commercially sustainable investment case to be made.

Details on the BDUK model for the Superfast Extension Programme can be found at Annex A. This also includes a link to the original data model explanatory notes. In summary, the data modelling has taken into account the following factors for the Superfast Extension Programme:

- i. Allocations are based on an assessment of the number of premises in each area which are likely to be without access to superfast broadband speeds following current private and publicly-funded roll-outs, and the estimated costs of a solution. The BDUK model does not use an average per-household figure because costs vary to reach each household.
- ii. BDUK has also taken into account conservative levels of private sector investment in further deployments, taking into account of the value of the anticipated customer base. Government funding will need to be matched by local funding (from local, European or other sources), to make investment attractive to the private sector.

4 Procurement Approaches

4.1.1 The commercial and procurement options available to Local Bodies for projects using the available funding are:

1. Change control of an existing contract
2. New mini-competition for a Call Off Contract using the BDUK Broadband Framework contract
3. New open (OJEU) procurement supported by BDUK guidance and procurement materials, either a stand-alone procurement or establishing a local framework.

These options are explained below.

Note: Potential additional funding from the claw back mechanism has not been taken into account in the allocation of funds, but BDUK recognises that this may provide an opportunity to further extend coverage at a later date when funding from the claw back mechanism becomes available. Projects that use claw back funding to further extend coverage will not have their SEP allocations adjusted.

4.1.2 Change control of an existing contract

Change control will be subject to materiality limits and timeframes. However, where the additional funding is within these limits, this route will offer the quickest and lowest administration cost to extend coverage outcomes. Change Control and Materiality Guidance can be found on the Local Authority Huddle site under Rural Implementation - Files – General Folders – Guidance.

4.1.3 New framework Call Off

Local Bodies wishing to undertake a procurement using the 'gap funding' model may undertake a mini-competition using the Broadband Framework that has been agreed by BDUK with BT and Fujitsu. The Broadband Framework is currently set to expire in June 2014. Therefore, unless the Framework is extended, any additional monies would need to be identified and contracted, although not spent, before this time. BDUK is consulting with the European Commission before taking a decision about extending the Framework and will keep Local Bodies informed of the outcome.

New procurement using BDUK guidance and procurement materials

Local Bodies may decide to undertake a new procurement. Existing BDUK commercial documentation (requirements, framework terms, template contract, evaluation processes etc.) and example documents from recent Local Body procurements will be updated and made available to support local procurements if required.

A number of variations of this process are envisaged:

- i. A relatively simple OJEU procurement using the open procedure to procure additional superfast coverage;
- ii. Establish a local framework that can be used to call-off the local requirements as in (i) above but which could also remain in place for both further call-off and for neighbouring projects to use at a later date. The advantage of this approach is that only the first procurement is a full procurement. Subsequent projects would be able to progress more quickly with a limited supplier engagement required.
- iii. A group of Local Bodies could establish a regional framework, thereby allowing for several call-offs from a number of Local Bodies and demonstrating a larger opportunity to the market place.

While each of these variations represents open market procurement, there will be the opportunity to utilise the existing BDUK documentation or documents from recent Local Body procurements as a starting point in the development of tender documents. These would not be mandatory, but Local Bodies may wish to consider using them as this may result both in time and cost efficiencies as well as ensuring maximum likelihood of outcomes remaining compliant with the UK's State aid National Broadband Scheme.

5 State aid considerations

Any public sector intervention within the broadband market place needs to be considered under EU Broadband Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks 2013 (Broadband Guidelines)¹. The European Commission has approved the National Broadband Scheme (NBS) for the UK (SA33671)². This allows projects which comply with the terms of the Scheme to go ahead following clearance by BDUK, without needing further approval from the European Commission.

5.1.1 Key points to note about the NBS are set out below:-

1. The NBS is an 'umbrella scheme' for the UK that enables Local Bodies and other bodies proposing to use State aid for broadband projects to seek approval under the Scheme.
2. Approvals under the Scheme are provided via the BDUK National Competency Centre (NCC).
3. The current approval expires in June 2015. Projects seeking approval under the NBS need to be approved by 30 June 2015 and procurement therefore needs to be complete before this date (although implementation can continue beyond that date).
4. The current approval imposes certain minimum requirements on any procured solution and these include:
 - a. Enabling step change in capability with headline speeds of 30 Mbps for Next Generation Access (NGA) solutions.
 - b. Significant investment in passive infrastructure and doubling speeds.
 - c. Seek to make use of existing assets.

¹

² http://ec.europa.eu/competition/state_aid/cases/243212/243212_1387832_172_1.pdf

- d. Provision of wholesale access to infrastructure.
- e. Benchmarked prices.
- f. A claw back mechanism.
5. Urban only interventions are not permitted, given the view of the European Commission that competitive conditions in urban areas are different to rural areas.

To gain approval within the NBS, projects utilising BDUK funding (as well as other sources of public funding) will need to be compatible with the requirements of the Scheme. More detailed guidance on the application and use of the NBS can be found at <https://www.gov.uk/broadband-delivery-uk#state-aid>.

It should be noted that the National Broadband Scheme expires on 30 June 2015 and BDUK will be entering into dialogue with the European Commission regarding a potential extension of the NBS or alternative arrangements. Whilst it is expected that these succession arrangements will be on a similar basis to that of the NBS, it should not be assumed that this is the case.

6 Funding approval process

The approval process for allocating funding to projects is based on the following approach:

6.1.1 Stage 1: Announcement of funding allocation

BDUK will confirm the indicative funding allocation for each Local Body, as announced by DCMS.

6.1.2 Stage 2: Expression of Interest (EOI)

Local Bodies wishing to take up their indicative funding are asked to respond to BDUK using the Expression of Interest (EOI) template. The purpose of the EOI is to give BDUK an indication of the likely take-up of the funding and to provide a high level summary of the expected coverage outcomes and funding for each project. If Local Bodies are clear about their proposed approach and have funding certainty they may submit the EOI and Request for Funding (Stage 4) together.

The EOI template requests information on the following:

- a. Details of the Local Bodies involved
- b. Current expected coverage in the project area
- c. Overview of plans to extend coverage and procurement route
- d. Funding requirement, including if projects require a lower amount in the absence of match or a larger amount if greater coverage were possible and more match would be available. (*This will help BDUK to gauge future demand.*) Local Bodies are also asked to identify anticipated sources of match funding.
- e. Governance (existing projects need to confirm current arrangements will remain in place)
- f. Confirmation of proposed State aid clearance approach

Note: only one EOI is required for each project (i.e. where one or more Local Authorities have a single project only one EOI is required).

6.1.3 Stage 3: EOI approval process

BDUK will review each EOI to confirm that the requested funding is in line with the indicative allocation and that match funding is anticipated, and to ensure that the proposed deployment routes are likely to deliver value for money and are State aid compliant.

Once the EOI has been approved, BDUK will issue an approval letter to allow the project to submit a Funding Request.

6.1.4 Stage 4: Formal request for funding: Addendum to Local Broadband Plan

The purpose of the formal request for funding is for the Local Body to confirm details for the scope of their project(s) as well as the funding and the delivery route. For Local Bodies which already have a Local Broadband Plan (LBP) all that is required would be to complete this Funding Request. The Funding Request is effectively an addendum to the LBP. Local Bodies which do not have a Local Broadband Plan in place will be required to produce one – see: <https://www.gov.uk/government/publications/bduk-broadband-delivery-project> for further guidance.

The Funding Request template seeks confirmation of the following:

- a. The additional superfast coverage that the project will deliver
 - b. Delivery route and anticipated timescales
 - c. Total funding requirement (capital expenditure for projected coverage), confirmation and certainty of funding sources.
 - d. Project team resources
- Proposed variations to the Call Off Contract terms

Local Bodies will be required to submit a separate Funding Request for each procurement route and should indicate in the EOI each of the procurement routes that are to be adopted.

All Funding Requests will need to be approved and be signed by the Senior Responsible Officer or Chief Executive.

6.1.5 Stage 5: Funding approval process

BDUK will review each Funding Request to confirm that the project proposals are in line with the SEP objectives and that they are likely to be deliverable and State aid compliant.

6.1.6 Timescales

Local Bodies have until **25 March 2014** to submit an Expression of Interest to confirm intention to take up their allocation and indicate sources of local match funding.

Local Bodies will have until **30 June 2014** to submit their initial Funding Request.

BDUK will confirm to the Local Body approval of the Expression of Interest and Funding Request within one month of receipt.

6.1.7 Assurance process

For new projects a Local Broadband Plan will need to accompany the Funding Request and will be subject to the full BDUK assurance process.

For existing projects proposing to undertake new call-offs or new procurements, once the Funding Request has been received BDUK will assess the proposal at Checkpoint B0 ('Agree Ready to Commence Call-off Process'). BDUK will not undertake detailed assessment of criteria which have previously been assured, such as governance arrangements, provided these are not changed substantively for projects using the additional funding. Depending on the overall volume of projects, BDUK will need to work with suppliers and Local Bodies from this point on to ensure the procurement process is managed as efficiently as possible. The procurement process (including associated State aid obligations) will be subject to further BDUK approval checkpoints in the same way as for the Rural Broadband Programme, including the BDUK value for money criteria assessment.

For projects seeking to deploy the additional funding through change control, following approval of the Funding Request the Local Body will need to initiate the change request process with their existing supplier and then seek formal BDUK agreement to the change through a Checkpoint E approval ('Agree Change Request').

For projects seeking to deploy the additional funding through a new OJEU procurement, following approval of the Funding Request, the Local Body will need to follow the BDUK Assurance guidelines for Non-Framework projects.

The relevant guidance for the assurance process up to contract signature can be found on the BDUK Local Authority Resource Centre Huddle site under BDUK Documents, Current Documents, Assurance, BDUK Checkpoint v2 4 Requirements. BDUK Project Directors can provide further advice.

6.1.8 Commitment of funding

Funding for English Local Authorities will be formally committed through a Grant Agreement between BDUK and the Local Authority once procurement is complete and State aid compliance is confirmed. For projects which already have a Grant Agreement this may be achieved through an amendment to the existing Agreement. Funding will be transferred upon evidenced achievement of agreed milestones, in the same way as for the Rural Broadband Programme.

Funding for the Devolved Administrations will be provided through a funding transfer with a Funding Transfer Agreement based on the model used for the Rural Broadband Programme.

7 Completing the Expression of Interest and Funding Request forms

It is imperative that both the EOI and Funding Request forms are completed with all the requested information to allow BDUK accelerate the approval process. Both forms will need to be submitted electronically via the following links:

EOI - https://dcms.eu.qualtrics.com/SE/?SID=SV_cSUXh5zgZl4oZkV

Funding request - https://dcms.eu.qualtrics.com/SE/?SID=SV_2ocFvxaVmnxeiWh

7.1 Completing the EOI (Part A)

7.1.1 Section 1 – General

Please provide details of other Local Bodies that form part of your project.

7.1.2 Section 2 – Overview of current expected coverage outcomes

It will be helpful if local projects provide the number of premises expected in each of the categories listed in the template. It is understood that some elements of this activity are subject to change (e.g. commercial delivery) but please provide the latest information that is available.

7.1.3 Section 3 – Overview of plans to extend coverage and procurement

BDUK would like confirmation of how each project plans to extend coverage. It would be extremely helpful to understand if this includes working with partnerships with neighbouring projects, particularly for a local procurement approach.

Local Bodies should also confirm the level of supplier engagement that has taken place with existing and new suppliers as well as the total anticipated funding (capex) and timescales they have been provided with.

BDUK also requests confirmation on what timescales your project is working to.

7.1.4 Section 4 – Funding

Local Bodies should confirm the extent to which they propose to take up the indicative BDUK funding allocation and their ability to provide match funding, and whether they are seeking any additional funding. However, it should be noted that BDUK cannot commit to automatically altering the announced allocations.

In addition an explanation of the likely funding sources and the certainty of the match funding should be indicated. Please note, however, that absolute certainty is not required before submitting the EOI, but will be required for a Funding Request, before BDUK agrees to pre-procurement activity going ahead.

7.1.5 Section 5 – Governance

BDUK requests that each Local Body confirms the names of the SRO and also the key posts within the project teams. Local Bodies will also need to confirm the project governance including, for existing BDUK projects, whether it is as previously confirmed to BDUK.

7.1.6 Section 6 – State aid

Further details can be found in Section 5 of this document. Whichever sourcing strategy is used, it is imperative that the project is State aid compatible. Full consideration must be given to State aid to ensure that all State aid requirements are met. Before commencing any SEP mapping, please contact the NCC for further advice and guidance. If you have any other questions please do contact the NCC.

7.2 Completing the Funding Request (Part B)

7.2.1 Section 1 – General

Please provide details of other Local Bodies that form part of your project.

7.2.2 Section 2 – Scope

This section needs to provide an overview of the project that the Funding Request will support. The project team will need to provide details of the targeted areas and targeted number of premises as well as the average cost per premise.

If the scope of the project covers a number of different procurement routes, the anticipated average cost per premise for each procurement route should be provided.

In addition, Local Bodies will need to provide details of any variations they may be planning to the terms in the Call Off Contract.

7.2.3 Section 3 – Delivery route/method

This section will need to detail the procurement route, target contract signature date and also the target date for the end of deployment.

7.2.4 Section 4 - Funding

BDUK will require confirmation that the agreed BDUK funding will be matched, and that the sources of local match funding to deliver all projects have been committed. Should local funding not be committed at the Funding Request stage, BDUK will need reassurance on commitment of the local funds before allowing any projects to progress to procurement.

7.2.5 Section 5 – Resources

Local Bodies will need to confirm what resources are in place and if they are not in place when they will be in place, to allow BDUK to manage the overall procurement process.

7.2.6 Section 6 – Approval

The Funding Request will need to be approved and be signed by the Senior Responsible Officer or Chief Executive. Local Bodies should allow additional time for any internal governance (i.e. Cabinet approvals) of the funding required for the project.

8 Other requirements for funding

The Superfast Extension Programme Grant Agreements or Funding Transfer Agreements will include conditions relating to publicity and transparency. All authorities, both national and local, will be required to adhere to these conditions as follows.

8.1.1 Publicity

When national and local authorities make announcements about projects that are in receipt of funding from the BDUK Superfast Extension Programme, they shall provide the opportunity for UK Government to include a Ministerial or other quotes in press releases and appropriate acknowledgement be given of the Government support in any interviews, speeches etc. Where funding amounts from BT or local authority/DA has been specified, UK Government contribution must also be included.

The DCMS / BDUK Superfast Britain logo shall be used on project websites and publications., Details of the branding protocol can be found on the LARC huddle site at: Rural Implementation, General Folders, Guidance, Superfast Britain Strapline Guidelines. There is also a general media protocol at: Documents, Current Documents, Publicity - DCMS Logos, Media Protocol, Media protocol 020913.

8.1.2 Mapping

Published plans help all stakeholders to gain an understanding of the expected coverage of the county level projects and potentially propose complementary local broadband projects.

Local Bodies must commit to publish information on their roll-out plans in line with the guidance provided by BDUK on 11 February 2014 on the LARC Huddle site

8.1.3 Universal Service Commitment

The Government remains committed to delivering a 2Mbps service for those areas that are unlikely to receive superfast broadband under commercial and publicly-funded roll-out plans. We expect that the additional funding available under the superfast extension programme may reduce the need for 2Mbps infill in some areas. Local bodies will need to keep their plans for delivering the commitment under review and discuss with BDUK as required.

BDUK SEP Model – Explanatory Notes

1. Model Summary

The Superfast Extension Programme Model, ‘SEP Model’, is a detailed bottom-up geographic model that BDUK has developed to allow timely decisions and announcements on the Government’s superfast broadband policy by:

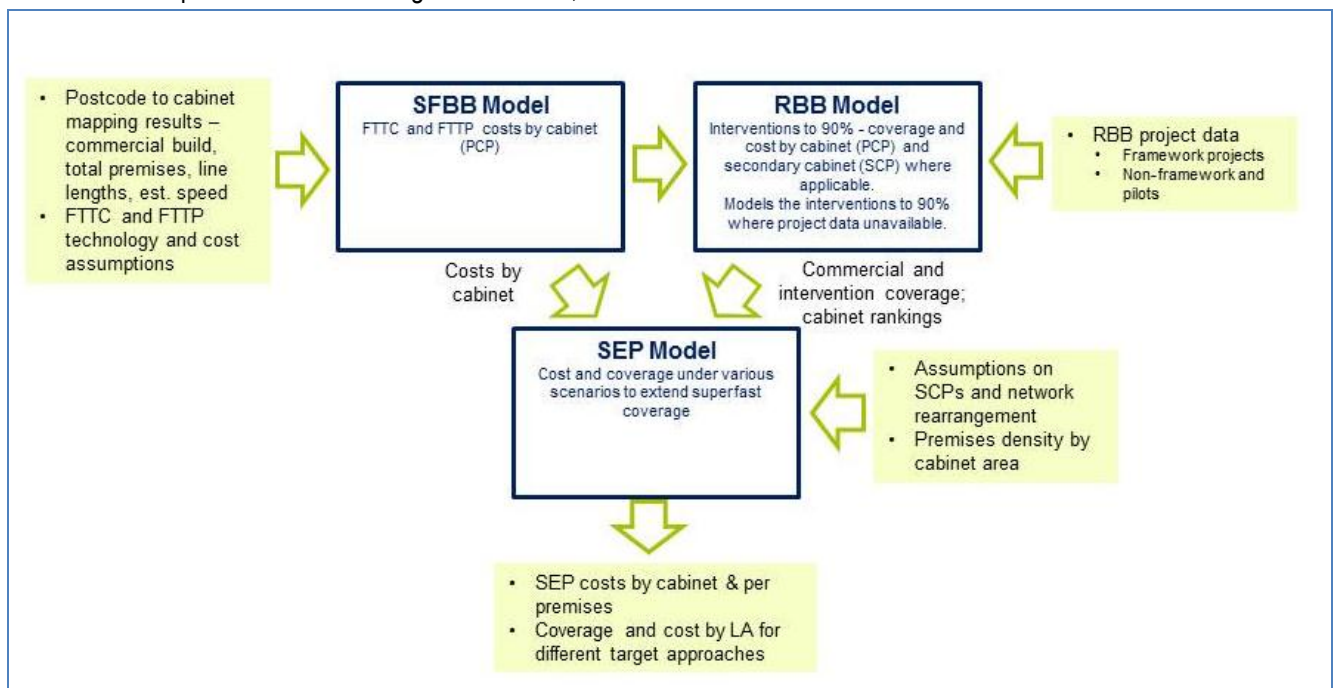
- **Modelling** which premises will not have superfast broadband once the commercial infrastructure programmes and the current BDUK Rural Broadband Projects and other interventions are complete. To do this, BDUK analyses approximately 2.5m records of input data on a quarterly basis.
- **Estimating the cost** to extend superfast coverage under various scenarios.
- **Allocating indicative funding** to Local Bodies based on the amount of gap-funding we think each area will require.

The SEP model builds upon the cost models that BDUK has previously constructed to support the Rural Broadband programme. These estimate the costs, revenues and therefore expected investment gap required by the private sector to meet the programme requirements under a range of scenarios. Full details on how these previous data model works can be found in the data model explanatory notes at: <http://old.culture.gov.uk/images/publications/BDUK-Data-Model-Explanatory-Notes.pdf>

2. Modelling scope

There are three key elements to the model, as illustrated in the diagram below:

- The Superfast broadband cost model, ‘SFBB Model’
- Rural Broadband Programme model, ‘RBB Model’
- The Superfast Extension Programme Model, ‘SEP Model’.



3. Modelling approach

The models develop Fibre to the Cabinet (FTTC) and Fibre to the Premises (FTTP) costs as a useful proxy of financial need to achieve BDUK's objectives. BDUK does not presume that FTTC or FTTP will always be the best NGA solution – others may be more cost effective and Local Bodies are responsible for sourcing choices.

4. SFBB Model overview

The superfast broadband model estimates the cost to build FTTC and FTTP on the following basis:

- **Fibre to the cabinet (FTTC)** to each existing BT and KCom cabinet in the UK. The model also estimates costs for new cabinets to reach Exchange Only lines and long lines.
- **Fibre to the premises (FTTP)** served from each existing BT and KCom cabinet in the UK, and for the Exchange Only premises. Where the Exchange-to-cabinet-to-premises route length is excessive in relation to the straight line distance from Exchange-to-premises, assumptions are applied for the route that would typically be taken in practice.

The model uses results from BDUK's geographic (GIS) modelling. The GIS model combines data on postcode and cabinet locations with models on the variation of VDSL speed with distance from the cabinet, data on which cabinet(s) the premises in each postcode are connected to, and information on the coverage of non FTTx commercial NGA networks, to create a database of line length, estimated VDSL speed and NGA infrastructure status at sub-postcode level.

Reference cost data is used to estimate the capital cost of upgrading cabinets to deliver superfast broadband services and then uses a reference take-up rate to estimate customer revenues for each cabinet.

5. RBB Model overview

The RBB Model is used to estimate the coverage of the current Rural Broadband Programme. It uses data on the announced and planned commercial infrastructure coverage, line speed data from the BDUK GIS modelling, along with real and modelled data from the BDUK-supported and other interventions, to estimate which premises will remain unserved after the RBB programme is complete.

Where project data is unavailable, the modelling approach to estimating the project coverage is to upgrade non-commercial cabinets in Local Authority areas until a floor threshold for superfast coverage (e.g. 90% of premises, or the contracted coverage figure) has been reached. Premises that are expected to receive less than 24Mbit/s, after the above targets are met are input into the SEP Model.

6. SEP Model overview

The SEP Model takes the SFBB model and RBB model outputs and estimates the cost and combined coverage for various local floor targets to extend superfast coverage.

The SEP model adopts a similar approach to the RBB Model - SEP project coverage is estimated by upgrading non-commercial and non-RBB cabinets in Local Authority areas until a floor threshold for superfast coverage has been reached, or where enabling cabinets is no longer an effective means to increase coverage.

The order in which cabinets are enabled is determined by the modelled cost per premises passed, including only the premises that are modelled to receive minimum 24 Mbit/s in this calculation.

7. Inputs

Together, the three models outlined above use a number of sources including:

- Ordnance Survey geographic information such as Code Point;
- Published BT FTTx exchange upgrade announcements;
- Commercially confidential information from BT Openreach such as postcodes served by different cabinets, and cabinet upgrades;
- Similar information from KCOM in and near Hull;
- Information from Virgin Media on cable coverage by postcode;
- Information from the BDUK-supported projects and non-framework projects on proposed coverage.

Alternative top-down BDUK estimates of bid coverage exist from aggregate information for each project on intervention areas and so implicitly on existing and planned commercial coverage. These two sets of estimates have been compared to quality assure the bottom-up SEP model: the majority of projects had superfast baseline differences of less than 1%, as did the nationwide aggregate.

8. Cost calculations

Costs are derived for each existing BT or KCom cabinet, and subsequently per NGA white premises, using the above inputs in addition to the reference cost data for unit costs relating to each element the network. The total cost per cabinet varies widely across the BT network, and is function of

- the number of premises served,;
- the type of civil engineering work required - for example digging road, footpath or grass;
- the take up; and
- the distance between exchange and cabinet.

Costs are also modelled for installing new cabinets, which extends superfast to areas where the connections from premises to cabinet are currently too long, and where premises are not currently connected to a cabinet.

The least viable premises tend to be located in remote rural areas, but rurality is not a consistent indicator of high FTTC cost – the key factors are the number of premises served by the cabinet and its distance from the exchange. The cost per premises served by minimum 24 Mbit/s is the key measure used in the coverage estimates and funding calculations, and is influenced by the distance between the cabinet and the premises it serves.

Commercial investment potential is subtracted from the capital investment cost for each cabinet to estimate the public subsidy requirement per cabinet, which when aggregated for any given area can be halved to provide the BDUK allocation.

9. Funding allocation calculations

The cost per premises and the total premises covered with minimum 24 Mbit/s NGA for each cabinet area are used to rank each cabinet. These rankings are used to determine whether the cabinet would be enabled under various scenarios for target coverage. The targets can be set at a Local Authority level, at National level or at a UK level.

The model also combines scenarios, for example by attempting to extend superfast coverage to minimum 90% in each Local Authority before using the remaining funding to extend superfast as far as possible across the UK on a 'Next Best Value' basis.

BDUK estimates that approximately 4% of UK premises are not suitable for a FTTC solution, even after allowance is made for installing new cabinets and some network reconfigurations. The model can apply a maximum cost per premises along with a minimum number of premises served by the cabinet to identify these premises.

Where FTTC is identified as unsuitable, the FTTP cost is substituted. This is relevant where costs have been derived for imposing a 90% floor target on each Local Authority area, because in some areas the model suggests it is not possible to reach this target using FTTC alone.

For floor targets beyond 90%, the model prioritises coverage in other areas that remain cost effective for FTTC. The model is agnostic on location on cabinet location and ranks cabinets in order from lowest subsidy requirement to highest, until national coverage level required is reached; the order of cabinets for upgrade is therefore wide spread across the UK. This can be varied by entering specific rules to vary the outcome, for example to arrive at a more equitable spread of funding.

10. Limitations of the modelling

The model will not give precise details of what will actually happen in all respects of NGA broadband roll out in the future, and no model would be expected to achieve this. So long as the weaknesses are understood and accepted it remains a useful tool. The main limitations are in the uncertainty over the baseline for SEP.

This will be an issue because of the timing of SEP in relation to the current programmes. There will be variations in both the commercial roll out and also in the Rural Broadband programme roll out.

The BDUK funding allocation model relies on a number of inputs that are volatile. We should expect the 'true' position to continue changing after any announcement. The total premises that have been covered by existing programmes will not be finalised until the last phase of each Local Body is surveyed and designed but the confidence level should increase as the design and installation gets completed. To have a completely firm basis for allocating funding we would need to wait until all current superfast broadband delivery is complete, but clearly that would cause excessive delay to additional deployment. It is therefore inevitable that there will be a degree of uncertainty in the estimated required funding at this stage.