Superfast Broadband Extension Programme – Decision on SSDC funding contributions

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1. Purpose of Report

1.1 This report discusses Superfast Broadband extension in Devon and Somerset and the releasing of previously agreed funding (made by the District Executive Committee in June, 2015) of £640,000 to the Connecting Devon and Somerset (CDS) Superfast (broadband) Extension Programme (SEP).

2. Public Interest

- 2.1 The availability of high speed broadband is important to the economic and social wellbeing of the district. It is seen by many as essential to managing their day to day lives. Therefore it is critical infrastructure to the district, both for residents and businesses. SSDC in agreeing the Council Plan 2016 2021 have committed to the priority of supporting district-wide roll out of superfast broadband.
- 2.2 In the past four years much of South Somerset has benefitted from the roll-out of superfast broadband. Within the District 205 cabinets are currently live (fibre-enabled) with 12 soon to become live¹. The Connecting Devon and Somerset Programme has averaged delivery of 7,000 premises a month and is on track to extend Superfast broadband to around 90% of premises by the end of 2016.At the end of the last quarter South Somerset had 46,500 premises connected to fibre delivered broadband via 195 cabinets.
- 2.3 Average broadband speed in the UK has more than quadrupled since 2010 from 5.2Mbps in May 2010 to **28Mbps** in June 2015².
- 2.4 CDS, the programme organisers, now aim to increase the availability of superfast broadband to 95% of South Somerset premises under the SEP. This programme takes advantage of various UK and European funding streams.

3. Recommendations

3.1 Members consider the report and, in the light of the current position, determine whether to commit additional investment in Superfast Broadband to the CDS Phase 2 programme.

¹ Note that these figures only relate to the Connecting Devon and Somerset roll out

² Ofcom Infrastructure Report, 2014

3.2 Should they confirm that they wish to invest £640,000, to delegate the signing of the collaboration agreement to the Assistant Director (Legal and Corporate Services (Ian Clarke) in consultation with the Leader of Council, the Portfolio Holder for Environment and Economic Development and the Strategic Director (Rina Singh).

4. Background

- 4.1 The current CDS programme is being delivered as a joint partnership of the following organisations that operate through a Collaboration Agreement across the partner organisations:
 - Somerset and Devon County Councils
 - Torbay Council
 - Bath and North East Somerset and North Somerset Councils
- 4.2 Somerset County Council is the Accountable Body. It is proposed that the same partnership arrangement and governance is used as the basis of the Superfast Extension Programme but that it is extended to include the district councils who are providing capital investment to support the new extension programme. The CDS Board has been established to manage the project and the Somerset District Councils currently have one seat on the Board
- 4.3 On the 19th June 2014, South Somerset District Council District Executive agreed, in-principle, to a capital funding commitment of £0.64m which when added to the funding from the County council, LEP, and BDUK would deliver Superfast Broadband availability to an additional 5% of the district (approx. 6,290 additional premises) by the end of 2017 through the Superfast Extension programme (SEP). This would mean delivery to 95% of the district, since 90% will already be delivered under the current Connecting Devon and Somerset (CDS) programme.
- 4.3.1 The June 2014 District Executive agreed their contribution subject to:
 - Satisfactory provision of a detailed assessment of the superfast broadband extension roll-out programme from which it is clear that it is favourable and beneficial to businesses in South Somerset.
 - A satisfactory partnering agreement and governance arrangement to ensure that this Council is fully engaged and involved in the delivery of superfast broadband
 - A satisfactory return can be guaranteed from the investment

5. Current Position

5.1 The procurement of a potential contractor to deliver the project is underway following an unsuccessful procurement exercise in 2015 in which the single bidder (BT) was deemed not to provide value for money with their offer in terms of coverage and timing.

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- 5.2 A Collaboration Agreement must be signed by all parties which covers governance, financial contributions, dispute mechanisms, and liabilities. Somerset County Council wish for the Collaboration Agreement relating to the District Contributions for the next procurement phase to be completed by May 12th 2016 so that there is certainty regarding finance which will be available when the Invitation to Tender (ITT) is issued. CDS are currently awaiting the outcome of a public consultation on the Open Market Review (OMR) assessment. The consultation ends on 21 May. This exercise will inform the proposed 'lotting' strategy (breaking up the contract into different geographies). They are working to achieve 'lots' which are likely to be commercially attractive to suppliers It is currently anticipated that these will need to be of a commercially viable size and will not be limited to individual district areas. There is no guarantee that 'lotting' will occur however, and this is subject to a board decision.
- 5.3 There have been a number of issues that have been of potential concern to this Council. The issues raised above are addressed more fully by a report prepared by SCC officers and attached at Appendix 1 Draft Collaboration agreement Proposal. Key points are summarised below:-
- 5.4 A satisfactory partnering agreement and governance arrangement to ensure that this council is fully engaged and involved in the delivery of superfast Broadband.
- 5.5 At present there is one vote for Somerset Districts combined for the CDS Board (this is currently taken up by Cllr Williams, Leader of Taunton Deane Borough Council agreed by the Somerset Leaders Group). As the Somerset Districts are potentially now providing significant contributions, comparable (collectively) to the proportions contributed by Somerset County Council and Devon County Council, the proposal is that representation levels would be increased to two from the districts. The two County authorities each have two votes on the board.
- 5.6 Satisfactory provision of a detailed assessment of the superfast broadband extension roll-out programme from which it is clear that it is favourable and beneficial to businesses in South Somerset.
- 5.7 CDS have explained that prior to an Invitation to Tender (ITT), it is not possible to provide a definite answer about the extra coverage that will be achieved because they do not know what solutions bidders will offer or what would be secured with any additional funding. Officers have asked if SSDC funding can be considered once the tenders are assessed.
- 5.8 SSDC are advised that the procurement process is complex and limits the ability to introduce money later into a contract as a dissatisfied bidder or even someone who did not bid at all could at a later stage challenge the contract award on the basis that they would have included a different bid (or bid at all) had they known that additional money was available. For similar reasons we are advised it is not practical to have SSDC contribution available on a contingent basis to be allocated after the bids have been seen to demonstrate advantage to SSDC's communities. This we are advised would present a significant procurement risk for the project.

- 5.9 At present the board has not made a final decision on a 'lotting' strategy/super lots. This decision cannot be made until after the public consultation has closed and data analysed. However CDC has advised that a contract could only be awarded to the best provider for each 'lot'.
- 5.10 CDS can confirm that, if approved, any allocation of district money will be spent in the district, but the method for assurance is not evidenced. As the contracts progress continuing assurance will be necessary for both technical and financial issues. It is anticipated that the new ITT will require bidders to respond on a premise (as opposed to a post code) basis and this should afford good opportunity to ensure detailed assessment of both the initial bid as well as the implementation of the programme.
- 5.11 SSDC's contribution can be seen in context to the total value of the Phase 2 programme in the table below.

FUNDER	CONTRIBUTION £	STATUS	CONDITIONS
SCC	1.6m	Confirmed	
DCC	2.4m	Confirmed	
SOMERSET DISTRICTS	1.5m	Confirmed	Evidence req'd of spend in each District
NORTH SOMERSET	0.2m	Confirmed	Evidence req'd of spend in each District
BATH & NE SOMERSET	0.2m	Confirmed	Evidence req'd of spend in each District
ERDF	4.3m	Pending	60% eligible spend in Devon on SME connectivity 50% eligible spend in Somerset on SME connectivity
LEP	9.5m	Confirmed	Business connectivity
BDUK	20.6m	Confirmed	
	TOTAL ALL CONFIRMED FUNDING		36.4m
	PENDING FUNDS		4.3m
	TOTAL ALL FUNDS		40.7m

5.12 SSDC has expressed a wish that the benefit of the programme be targeted at businesses. However, although there is some scope for prioritising businesses, this would be weighed against the purpose of the programme which attempts to balance value for money with bringing Broadband and SFBB to rural/ very rural communities to reduce the digital divide. The rationale of the tender being is to get as much SFBB coverage as possible across the whole region (SCC report Appendix 1 para 5.2)

Deployment therefore will mainly be limited by what the market offers in the tender responses.

6. The Collaboration Agreement.

6.1 In committing to sign the agreement there are some key risks and issues to consider. There is a specific risk related to the procurement itself as each partner will indemnify the lead authority for its proportionate share of the procurement exercise and the contract management process, based on contributions made. The cost sharing relating to liability is on the following basis and therefore limits the liability of each partner as outlined in the table below:

B&NES	3.27%
DEVON	37.64%
MENDIP	6.55%
NORTH SOMERSET	6.27%
SEDGEMOOR	5.56%
SOMERSET	24.22%
SOUTH SOMERSET	10.47%
TAUNTON DEANE	6.22%
WEST SOMERSET	2.78%

- 6.2 The exposure of South Somerset District Council is therefore relatively high compared to other districts in Somerset and remains a risk associated with process. This risk should be addressed by good procurement practice is letting the contract and robust contract management in the delivery phase. However this would take place via the board representative which may or may not be an SSDC officer or member.
- 6.3 At the present time, these matters have not been entirely resolved and discussions continue. A verbal update will be given at the meeting to allow Members to make a decision (given by South Somerset and Somerset County Council officers).

7. Summary

- 7.1 Due to the limitations of the tender process as advised there is no hard and fast way of guaranteeing the level of coverage for the additional SSDC contribution of £640k. As discussed above and in appendix one the exact coverage in each District is not guaranteed.
- 7.2 It is logical to assume that the greater the investment, offered by SSDC contributing the greater the return to South Somerset and the greater the match funding.
- 7.3 The procurement process is complex and it is not clear from the collaboration agreement how the assurance processes are capable of being monitored at a district level.

- 7.4 If districts don't invest in the Phase 2 roll out they will simply get the coverage that the ITT delivers based on bids and from existing funding sources (Para 5.7 SCC Report Appendix 1).
- 7.5 Board representation has been partially addressed by providing a second place on the CDS Board which will give Districts the same number of votes as Somerset and Devon County Councils, and should members wish to participate they will have to decide if this provides satisfactory re-assurance.
- 7.6 Questions around the apportionment of indemnity carried by districts are not clear. The risk areas related to the agreement are outlined in the report. Formal legal advice will be provided to the Assistant Director Legal and Democratic Services prior to sign off on the agreement. Should members decide to contribute the sign off will be informed by this advice.
- 7.7 From all information provided and viewed it would not appear feasible to undertake a competing South Somerset alternative to this large scale and complex procurement exercise. However small scale assistance to particular communities is possible through grant schemes. Some of these options were described in the previous report to District Executive and is attached at appendix

8. Financial Implications

8.1 If members agree to funding of £640,000 the grant will be found from Useable Capital Receipts. Currently £16.4 million is available i.e. not committed within the current capital programme. A sum of £20,160 will need to be added to the savings to find within the 2017/18 Medium Term Financial Plan to replace the loss of interest.

9. Corporate Priority Implications

- 9.1 SSDC Council Plan 2016 2021 indicates a priority of supporting district-wide roll out of superfast broadband.
- 9.2 The Economic Development Team are currently writing the SSDC Economic Development Strategy 2016-2019 which states as an objective that we will ensure the provision of a competitive digital infrastructure by supporting the CDS programme.

10. Carbon Emissions and Climate Change Implications

10.1 There are no current implications associated with this report though the extension programme assists improvements in communication and the reduction of energy use.

11. Equality and Diversity Implications

11.1 In preparing this report, due consideration has been given SSDC's statutory Equality duties Section 149(1) of the Equality Act 2010.

- 11.2 Aspects of this project related to subsidising the rollout of broadband have a low relevance to equality, whilst implementation has a medium relevance to equality. Having greater superfast broadband coverage has the potential to impact positively and consequently there are negatives if there is not full coverage in the District.
- 11.3 A programme of digital inclusion is being undertaken in the district to ensure that people are supported to use the internet in ways that will enhance their quality of life and contribute towards helping overcome other disadvantages which they may face.

12. Background Papers

- District Executive Report 19th June 2014 Match Funding for the Superfast Broadband Extension Programme.
- Broadband Task and Finish Group Scrutiny Review, Sept, 2014.
- Superfast Broadband Extension Programme Decision on SSDC funding contributions, June 2015.
- Connecting Devon and Somerset Members Briefing, April 2016.
- http://www.connectingdevonandsomerset.co.uk/ is also a recommended source of considerable background information and further detail.

APPENDIX 1

SOMERSET COUNTY COUNCIL REPORT

DRAFT COLLABORATION AGREEMENT PROPOSAL

- 1. Somerset districts had previously agreed in principle to make a financial contribution in the Phase 2 procurement to further extend Broadband coverage within their respective areas than would otherwise be achieved with the existing funding sources available. In order for districts to finalise their commitments further approvals are required through each individual authority's internal mechanisms.
- **2.** During the initial procurement process in June 2015 issues arose due to the short timescale required for the sign off the collaboration agreement. The main issues identified at that time were:
 - 2.1 Indemnities
 - 2.2 Representation on the programme board
 - 2.3 Local outcomes and ring fencing of funds
 - 2.4 Repayment of contributions for termination/ early withdrawal
 - 2.5 Timing and governance issues for the respective parties

Proposal

3. Indemnities relating to the procurement and contract process:

- 3.1 The collaboration agreement is to reflect a balance of responsibility between the participating parties. It is appropriate for SCC and DCC to have indemnities from the participants as they are bearing the risk related to the procurement and contract process.
- 3.2 SCC /DCC are seeking comfort from all partners for any additional costs/ liabilities that they may incur as a result of procuring/ entering the contract if costs/ responsibilities arise which are not due to their fault. The principle being that such liabilities should be shared by all those contributing to the procurement of the service.
- 3.3 This element of the agreement requests indemnity in proportion to the contribution made by each authority. This creates an equitable situation reflecting the collaborative nature of the partnership.
- 3.4 It should be noted that if each district ran its own procurement individually it would bear the full cost and risk. This would include the processes relating to securing a state aid notice. Whilst individuals may aspire to this costs would be significant. NB In line with the principle of proportionality SCC and DCC are making the majority of the contribution so will bear most of any such "unexpected" costs. Therefore SCC and DCC are incentivised to keep and such risk and cost to a minimum.
- 3.5 **Alternatives** if a party is not prepared to accept its proportionate part of the costs that means that other parties will have to accept a greater share of the risk. All parties are under similar financial constraints. It is unlikely that other bodies

- will be prepared to underwrite another party, indeed there appears to be no reason for others to do so even if they could.
- 3.6 **Solution** Unfortunately this condition is requirement of the agreement. A collaboration agreement in similar terms has been reached in respect of the "moors" contract awarded to Airband where cost and risk were shared in this way.

4. Board Representation:

- 4.1 Concerns that districts did not have sufficient voice on the board. At present there is 1 vote combined for the CDS board which was secured as an element of the debate around phase 2 of the rollout. The representative is chose from the Somerset Leaders Group.
- 4.2 As the Somerset districts are providing significant contributions, comparable (collectively) to the proportions contributed by SCC and DCC there is a belief that representation levels should be increased. The 2 county authorities have 2 votes on the board. It is proposed that the districts collectively have 2 votes on the board.
- 4.3 Solution CDS proposes one member and one officer from the districts should join the board. The districts would need to decide how they wish to manage this possibly representation from 2 separate districts. The importance of confidentiality and acceptance of majority decisions is paramount.
- 4.4 It should be noted that the board has historically arrived at unanimous decisions and that influence and feedback is an ongoing matter. If districts wish to provide officer capacity to work on the project as contract(s) progress that would be welcomed.

5. Outcomes /ring fencing:

- 5.1 Concerns about return for district investment. Limitations of the tender process mean that it is difficult to identify with precision the coverage of the contract before tenders are returned. The whole CDS area which is < 24 mbps (Superfast) will form the contract intervention area for improved coverage in the phase 2 procurement. However the tender will provide for weighting for "priority" areas. These will be influenced by the funding source e.g. LEP money for business connections.</p>
- 5.2 It is important to understand that the Connecting Devon and Somerset Broadband Plan (with its various updates) is the bedrock of the principles that underpin the Broadband strategy and deployment. This.
- 5.3 Solution: CDS can confirm that district money will be spent in district. However due to the need to show VFM it will not be possible to guarantee a level of coverage for any area. Broadband infrastructure does not easily break down according to district, but rather by geography and other constraints related to the respective technologies.
- 5.4 Districts will therefore not be able to have a final say on where investment is deployed. Deployment will mainly be limited by what the market offers in the tender responses.
- 5.5 It is important to appreciate that if the ITT is too complicated bidders may not bid or there may be a reciprocal increase in costs and decrease in coverage.

- 5.6 In summary the ITT will seek a minimum level of coverage in each area (this may be by individual zone or a "super lot") but the final extent of coverage which will be provided will be dependent on the tender response. The final level of coverage within the tender response cannot be guaranteed. The ITT will ensure though that each contributing district's financial stake will be spent in district and the VFM is maximised.
- 5.7 Alternatives: The question has been raised why a district should contribute if it cannot guarantee that it will get "extra" for its money. This appears to miss the point of the district contribution and indeed the way in which a tender of this nature operates. Put simply if a district does not wish to invest in Broadband then it does not have to. That district will simply get the response which is achieved through the overall ITT whatever the market decides to provide. The opportunity that is offered to each district is to secure additional cover within district to the amount of their funding contribution. This would be achieved without the district incurring the usual overheads of procurement and running a contract for the amount of the district investment. If districts do not wish to engage in this collaborative arrangement then they must indicate at an early stage so that the ITT is prepared on an accurate financial footing. Bidders will put forward such proposals as they wish for the amount of public subsidy available. If there is less public subsidy the bidders will simply provide less coverage. Clearly districts that do not wish to collaborate would not be a party to the coverage agreements and would be at a disadvantage when information was shared within the partnership.

Repayment of contributions

- 6. Concern about ability to withdraw funding before the end of the project. This cannot be encouraged due to the impact on other participants. Withdrawal would only be possible if the contract were inoperable. E.g. if zoning resulted in no cover for a particular area it may be necessary to consider the position and other alternatives to remedy the position. E.g. to see whether gainshare could be used to secure a solution.
- **7. Solution:** Unfortunately due to the impact on others this condition would be a requirement of the agreement.
- **8. Timing**: Issues such as state aid are currently being considered but it is anticipated that the ITT will be issued over the next couple of months and district commitment will be required before Easter. Districts are therefore asked to do two things:
 - Finalise their financial commitments through their own internal mechanisms
 - Arrange via their legal representatives to authorise signing of the collaboration agreement

APPENDIX 2

Alternative options/examples to the CDS Programme

The case studies below are examples of Councils that have taken an alternative option to receiving superfast broadband in their area. By exploring alternatives, SSDC can make a more informed decision about their own options for superfast broadband.

West Oxfordshire District Council (WODC)

This is a public/private partnership agreement between WODC and Cotswold's Broadband through a £1.6 million loan that was matched by BDUK.

Details of this deal are available, but several key points emerged in our enquiries that made such a model unattractive to SSDC:

The loan is match funded by BDUK but only because of the long operational history between WODC, Cotswold Broadband and BDUK. The match funding was not the result of a speculative bid to BDUK but the development of a pre-existing option.

State Aid issues have been triggered and resolutions/outcomes are still awaited at the time of writing.

Eastbourne Borough Council

Eastbourne is now benefitting from a high speed fibre optic broadband network along its coastal edge. This has been provided via a special arrangement involving Eastbourne Borough Council which invested £367,000 in a broadband infrastructure supply company, CloudConnX, which has developed the town's new broadband network. The investment in CloudConnX also stands to provide the local authority with a future return over the next five years over and above the £367,000 originally laid down.

Eastbourne's unique linear geography made this particular type of broadband provision possible and it is unlikely to represent a suitable model for South Somerset.

Broadway Partners

Officers from SSDC met with Broadway Partners (telecoms and broadband specialists) in February 2015. Broadway Partners were instrumental in the creation of the West Oxfordshire model referred to above.

Whist it is possible to further explore a joint partnership venture, key issues were identified as a result of the discussions:

- There would be no match funding available from BDUK (and in this instance no opportunity to match fund with SCC).
- A JV contract would probably have to be procured through an open tendering process.

 There would clearly need to be a heavy commitment in terms of officer time in the preparation and business planning for such a venture

On the positive side, it was unlikely that State Aid issues would be triggered because of the absence of match funding through BDUK.

ITS technology Group

Officers contacted this company that specialise in the superfast connection of remote rural areas. They are currently working on rural broadband infill projects and can provide potential solutions. This group were however keen to know the outcome of the CDS bidding process, and thus where possible gaps might exist before undertaking any detailed feasibility work.

Community led solutions

For communities that are outside the SEP area or for communities who want to take more control by bringing forward delivery of this service, then a community led initiative, procured & funded by subscribers, *may* be an option. In all instances, a bespoke approach would be required with its own business case to assess the issues and costs of taking the technology to those places. Initiating this work will require an intensive amount of officer resource and we would need to ensure that it did not fall within the current CDS delivery or planned SEP.

SSDC could have a role in enabling these communities to work towards solutions. It would be possible to advise on any external funding sources and possibly offer our own grants and/or loans. There are many examples of "pioneer" communities who have decided to be proactive and deliver their own solutions. This solution is not mutually exclusive with the other options but would offer another method for remote communities who want to get connected. There are currently service providers working with communities to deliver Superfast Broadband through 3G telecommunication, but this route can restrict choice in a community to a single provider.

The information below is taken from BT's live website and provides information to rural communities on possible options they can take to receive superfast broadband. The BT website also advises communities interested in gap funding that before they enquire they should check if the community is scheduled to get superfast fibre broadband as part of the national rollout, or under the government's BDUK initiative. BT directs visitors to the postcode checker at www.superfast-openreach.co.uk. Only then, if the community is not recognised on either list do they suggest emailing them so they can come and speak to them.

Connecting Devon and Somerset Voucher Scheme

Connecting Devon and Somerset has committed to bringing broadband to everyone within the Programme area. If premises are not yet able to receive broadband speeds of over 2Mbps residents may be able to get connected through the CDS voucher scheme. The scheme will provide a subsidy of up to £500, in the form of a voucher code, to fund the installation of a new broadband connection. Each premise can choose their supplier from the list approved by CDS; with every solution guaranteeing a minimum of 10Mbps download speed.

The scheme will run for one year up until the March 2017 and is open to individual residents, small businesses and communities. Individuals, small business and communities must

approach the suppliers on the Voucher Scheme for further details of their services and decide on the best fit with their requirements. Communities should work with suppliers to decide on a solution, however the individual voucher holder is able select their own supplier and a group cannot make a decision on behalf of another. Any premises connected through the scheme are still eligible for later extensions of the broader Programme.

Rural Broadband options

Community broadband projects have worked with small ISPs (altnets) to bypass the system rather than working within it or lobbying established providers for access in order to bring better internet access to whole villages.

What is gap funding?

The gap funding model is where Openreach pay the economically viable cost and private funding covers the remainder – making it a great option for communities to consider.

What is privately-funded broadband?

Privately-funded fibre broadband is when a local community (that is not on BT's commercial roll-out plans or within BDUK areas) 'self-funds' some of the cost of having Fibre to the Cabinet (FTTC) to their local exchange. They do not bear the complete cost, but what is referred to as 'the gap'. Rural areas of the UK are very expensive to reach, and cost more than BT's commercial deployment. It takes much longer for Openreach to break even on these kinds of investments. This means the really rural areas don't meet Openreach's standard commercial business case. BT ask for a gap fund to subsidise the cost difference, so that the time it takes to break even is the same as it would be for Openreach's commercial deployment.

When should a community look to go down the privately-funded path?

A community would typically look to fund their own fibre when it is:

- Not on the BT roll-out, in BDUK plans or is too far away from a BDUK cabinet.
- Capable of generating the necessary funds.

If you're interested in privately-funded fibre, how do you find out what is possible?

The first step is to contact your county council and find out if they've had any other similar queries or have a plan in place for your area. You could also start a local action group or look out for existing groups via the local media.

How long does it take to have fibre broadband once you've agreed a deal with Openreach?

The average lead time from contract signature (with Openreach) to enablement (of the infrastructure to enable service) is approximately nine months. This will all depend on the amount and complexity of the infrastructure that needs to be deployed.

How much will it cost my community?

This is dependent on the amount of infrastructure that needs to be deployed. And this will differ from community to community. A community will only be asked to cover costs above those of the BT commercial model. Once agreed, 50% of the gap funding must be paid prior to work starting and the final 50% on completion (once the infrastructure is in place it becomes part of the BT National Network). It is the responsibility of Openreach to maintain and update the infrastructure.

Will a community have a choice of which voice and fibre broadband supplier they have?

Yes, Openreach provides access to its network on an equal basis. This means that wherever they deploy fibre, a whole range of different service providers can offer broadband, bringing plenty of choice to consumers and local businesses.

What bandwidths will be available?

Bandwidths will range from up to 80 Mbit/s at a network level.

Final speeds are dependent on each property's distance from the fibre cabinet (typically they would expect a minimum of 15 Mbit/s at a range of approx. 900 metres from the cabinet). The speed will increase as the distance to the cabinet decreases (the closer you live the better the speed at a network level).

Can a community have either Fibre to the Premises (FTTP) or Fibre to the Cabinet (FTTC)?

This depends on the local infrastructure and where you are. This will be explained as part of the initial engagement process.

Is it more expensive to fund FTTP?

Yes, FTTP delivers the fibre from the exchange right to your property (instead of to the cabinet), which means installation and infrastructure costs are higher. In order to benefit from FTTP, the cabinet you are currently connected to for voice and broadband services will have needed to already be enabled for FTTC, so this challenge must be tackled first.

Demanding FTTC and FTTP

From the end of March 2013, it became possible to order Fibre to the Premises (FTTP), cables which can offer up to 300Mb speeds, on demand. The local exchange will already

need to be FTTC enabled and prices are based on the distance from the properties to the local fibre point, which in a rural area could be some way.

Providers will be keen for fibre to 'catch on' and go to many households once it's at one in a local area, so demonstrating strong local community demand could help.

Other villages have done a similar thing by using very local ISPs to, essentially, unbundle their local exchange and install new equipment. In April 2010, for example, local investors raised £37,000 to bring fibre broadband to Lyddington, Rutland in this way. Three's Rural Broadband Working Group also provided 11 communities with free 3G access in August 2011.

Using an altnet to get connected

Other villages have chosen to bypass BT altogether and ask a private company to install a local network. That can take the form of a high-speed wi-fi network - so the company will lay a fibre line to a transmitter on a high point like a public building and then subscribers in the local area buy their own aerials to pick up the signal - or a fixed line fibre network.

In Ashby de la Launde, Lincolnshire, for example, wi-fi has provided up to 70Mb broadband speeds and the Broadband for Rural North (B4RN) fibre project has bought 1Gb speeds to several villages in rural Lancashire.

Claverton Parish and CDS

Claverton Parish Council is a particularly interesting case study because they are within the District of Bath and North East Somerset which means they are within the boundaries of the CDS programme. Not all areas in Devon and Somerset are included in the rollout scheme because of their rural location. This Parish Council were able to find out after a great deal of time and effort that they were not included in the scheme and pursued their own solution to A recent news story about a project led by Dr Rodger Sykes (CEO of a technology company in Claverton) has raised interest in alternative ways of receiving broadband in villages and rural areas. The Parish privately co-funded a local fibre network with BT Open Reach and the project took three years to complete (2012-2015). They knew as an area that they would have to wait for BT to roll out their scheme to them so they worked with BT to solve the problem and 'jump the queue'. Claverton was outside the original footprint for superfast broadband (CDS planned 90-95% coverage). In 2012 a state aid application was made and if an area was planned to be commercially covered then CDS were not allowed to invest in this area under European Commission state aid regulations. Claverton discovered it was not included in the BT rollout plans so decided to fund a new cabinet rather than wait to be included in a future scheme as this could have taken several years. BT proposed a cofunded model and the community raised the necessary monies that BT defined.

In regards to how much money they had to invest as a community, a statement from Claverton Parish Council in 2013 states:

Cllr Sykes updated the Parish Council that the Claverton Broadband working group have now received the draft engagement offer from BT Openreach for the installation of the necessary cabinet equipment to enable the upgrading of the Broadband service to the village to Infinity (superfast broadband).

The required community contribution cost is £40,081 exclusive of VAT. VAT at 20% will add a further £8,016 to the cost. The total cost including VAT is £48,097.20. This is a fixed price contract, providing it is accepted within a 60 day period. If the contract is signed by the end of August BT will also commit to the project being completed by May 2014.

It's worth pointing out that the final cost may have changed since then, not least because Openreach was in discussion with HMRC as to the necessity of charging VAT on projects of this type.

Below is a table of rural communities that have discovered that they are not covered under BT's rollout scheme or BDUK. There is no information online of how these communities found out that they were not included in any scheme and were eligible to apply for alternative funding.

Communities that have taken different approaches to achieving superfast broadband in their area

Community	Approach	Achievement
Village of Ashley, Northamptonshire	Ashley Broadband Funding Campaign: raised £15k to close the funding gap (50% each). This offer price was only available if they committed to being part of the work schedule for the 2 nd quarter or 2015. At a later date it would have cost £47k.	Guaranteed access to fibre broadband by Spring 2015. Download speeds from 30 Mbps to 80Mbps. Customer service speeds depend on the product, distance from cabinet and internal wiring in their property.
Lancaster Way Business Park, Ely	Discovered business park was not included in the Cambridgeshire rollout programme, met with Annette Thorpe (BT Regional Partnership Director for East of England) and agreed to privately fund a cabinet for the Park's residents. No figure provided for cost.	Tenants can receive download speeds of just under 60Mbps and upload speeds of around 20 Mbps.
Binfield Heath, Oxfordshire	Discovered they were not to be included in BT's commercial fibre roll-out plans because the economics of delivering fibre broadband were too challenging. Caversham local exchange already upgraded so residents raised £56k to contribute towards the cost of upgrading and rearranging the broadband network serving the village. They had 2 new cabinets installed and a fibre link back to Caversham exchange.	Residents and businesses have access to broadband speeds of up to 80Mbps.
Fell End, Cumbria	There are 58 properties spread over a remote 11k area. The project cost more than £100k and was a partnership between the local	Use an innovative engineering solution: the ducting that houses fibre optic cable is being laid using a technique

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	community, Rural Community Broadband Fund, the Prince's Countryside Fund, the Holhird Trust, TalkTalk Digital Heroes and BT.	known as mole ploughing (mini diggers). Residents able to get FTTP download speed of 300Mbps
Islip village, Oxfordshire	Not included in BT's commercial fibre roll-out plans. Nearby Kidlington, the local exchange was already fibreenabled. Residents joined a partnership with BT and raised £11k towards the cost of laying a new fibre network to the village.	Households and businesses can receive broadband speeds of more than 30Mbps
Little Wenlock, Shropshire	Discovered they were unlikely to get superfast fibre broadband through a commercial rollout or local authority upgrade they joined into partnership with BT and raised more than £30k from UK Coal's Community Fund with additional funds from OpenReach. Nearby telephone exchange Dawley already upgraded to fibre broadband.	Residents now receive download speeds of up to 80Mbps and upload speeds of up to 20Mbps.
Preston Village, Hertfordshire	The village committee wrote to the CEO of BT asking for help to increase their original band width (.25Mbps). BT claimed it was not commercially viable to connect them to their own cabinet and they were 5.5km from the exchange. The committee raised the money needed for BT to provide the cabinet.	Residents can now receive download speeds averaging 55Mbps
Frilford, Oxfordshire	Discovered they were not included in the Oxfordshire rollout programme so they teamed up with Gigaclear³ who provided residents with fibre broadband for £100 per connection plus a monthly fee starting at £37 depending on speed required. Residents can also choose to lay a fibre cable from the boundary of their property to their home themselves or pay for an installer to lay the cable for around £85 for a 25m installation.	Superfast broadband speed of up to 1000Mbps delivered by Gigaclear
Darley, North	Local residents and the local council	New wireless network
Yorkshire	campaigned to secure funding from	installed July 2012 by

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³ Gigaclear is a privately funded company who specialise in providing the infrastructure of ultrafast fibre to the premises (FTTP) broadband for rural communities. For villages and rural communities to be eligible for a Gigaclear connection they need to be underserved by another high speed broadband provider, have at least 400 properties and at least 30% of residents need to sign up for the service. Location also matters however, Gigaclear will confirm this for applicants, but communities need to be within 3km of a fibre backbone provider or an existing Gigaclear community.

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	Government for the scheme, and partnered with LN Communications who provided the private funding and infrastructure. £90 installation fee (equipment and installation), router £50 (or can buy own) and prices range from £14.99 to £24.99 per month.	installing signal receivers at high points within the community to provide line of sight connections to houses and businesses. Once installed, residents can buy their own signal receiver. Speeds up to 50Mbps
Hambleden, Buckinghamshire	Area was a complete broadband not- spot until March, 2010. Residents raised £25k and received £5k from local council to establish a wireless broadband network foor the village. Cost £49.50 for installation per household and £29.50 a month with small businesses able to get faster speeds for £50 a month. Village Networks ⁴ carried out installation at £222 per property without the funding subsidy.	6Mbps available for residents and 10Mbps for small businesses delivered by Village Networks, Wimax
Forest of Bowland and the Lune Valley, Lancashire	Residents of 8 parishes in Lancashire dug channels across fields and lay their own fibre cables. Project began in 2012 when local residents formed a community led company, Broadband for the Rural North (B4RN) ⁵ . BT estimate connections to property in the area around £10k, laying the cables themselves reduced this to £1k per property. Residents then pay £30pm	Residents receive broadband speeds of 1000Mbps at £30 per month after self-installation
Iwade, Kent	In March 2010 residents noticed that a local BT exchange was about to be upgraded to a FTTC service but their more rural exchange was not. Parish Council formed a partnership with BT and received £13k from Kent County Council's broadband fund to upgrade their exchange plus £75 per household to cover cost of installing a fibre service.	Able to receive up to 40Mbps (superfast fibre broadband) by being served by the neigbouring telephone exchange in nearby Sittingbourne

⁴ Village Networks operates throughout Buckinghamshire: http://173.254.28.86/~villagf5/index.html
⁵ B4RN, Broadband for the Rural North, is a not-for-profit company set up to provide community owned fibre networks to villages in Lancashire: http://b4rn.org.uk/