



FREQUENTLY ASKED QUESTIONS FROM COMMUNITY ENGAGEMENT SESSIONS

SOUTH MARSTON PARISH COUNCIL – 17th July 2015

| Q | Question | Answer |
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| 1 | Is it possible for a Parish Council to become a reseller of the UKB Networks service and what would it involve? | <p>Yes. Anyone can set themselves up as a reseller of the service. They will need to buy from UKBN as a wholesaler and then retail the service to customers they will need to recruit.</p> <p>The Parish Council will need to hold the credit risk on behalf of their retail customers, provide first line customer support and collect the money.</p> |
| 2 | What impact do ionospheric storms have on the performance of the service? | <p>There is no effect to the system from any standard weather patterns.</p> <p>Ionospheric storms do not occur at a level that could affect radio signals at ground level. These happen at the highest levels of the atmosphere and do not affect ground level signals. They are also extremely rare in the UK.</p> |
| 3 | Does each property have to be within line of site of the mast to receive the service | <p>The property needs to have near to line of sight to the mast. The signal will easily pass through trees and foliage, but if there is a large building between the property and the mast then this can cause a shadow effect.</p> <p>As part of planning the network large buildings and the topography are taken into account to ensure the mast is positioned in the optimal position.</p> <p>To minimise the risk of shadows at an individual premise level the outdoor units (ODUs) will be put high on the outside of the building and the installers will ensure that the ODU is on the correct side of the building to receive the best service.</p> |

**WROUGHTON PARISH COUNCIL / ALEXANDRA PARK RESIDENTS ASSOCIATION –
18th July 2015**

| Q | Question | Answer |
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| 4 | What frequency does the service transmit at and how many channels do you have available? | The service operates between 3480 – 3500, 3580 – 3600 and 3605 – 3689 Mhz. This gives 6 channels of 20 Mhz. |
| 5 | How can we be sure that the service will be available at the times when most people are on line? | The contract is outcome based. BDUK's technical assessment of the proposed network has shown that the deployment in Swindon will produce the headline speeds and meet the contractual requirement to provide 90% of those speeds during busy hours. |
| 6 | Do you have a minimum take up requirement in order to justify putting a mast up in an area? | No |
| 7 | Do we have to pay for the installation of the dish on our house? | <p>There is no specific charge made by UKBN to ISPs for the dishes to be installed on customers' premises.</p> <p>However, some ISPs use a "connection charge" or "activation charge" to make the monthly fees more attractive by asking for an upfront payment. This is the nature of the broadband market and something that exists across all technology types.</p> <p>This is a decision for the individual Internet Service Providers (ISPs), and neither SBC or UKBN can influence the end retail prices so we urge customers to carefully read the terms and conditions of the end ISPs deals to ensure they understand what they are buying.</p> |
| 8 | Where a property manager puts a restriction on the addition of a dish to homes within an estate will UKB Networks contact the property agent to understand the costs to implement? | <p>UKBN will not have a legal relationship with residents in this way. The relationship will be with the ISPs the individual residents sign up with.</p> <p>That said UKBN will obviously try to alleviate any disputes by providing as much support as it can to affected residents.</p> |

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| 9 | What business solutions are you able to offer? | <p>End user propositions for business and consumer are an ISP decision.</p> <p>The service will provide the support needed for a Small Office Home Office worker. Larger businesses may need a more dedicated service. This is outside the scope of the initial project and would be subject to a separate agreement and service level</p> |
| 10 | Do you need regulatory licences for the hardware you are using? | <p>Yes.</p> <p>UKBN is fully licensed by Ofcom to use the spectrum it is using. No UKBN traffic passes through any shared spectrum to preserve the delivery of service.</p> |
| 11 | What quality assurance are you applying to ensure the hardware is tested and meets any regulations and complies with any certificates of conformity? | <p>This is a highly regulated area and UKBN conforms to all of the required standards set by Ofcom.</p> <p>All of the network is built to ICNIRP standards and each site is issued with a certificate of ICNIRP conformity as a standard</p> <p>Individual house level device equipment is certified by 3GPP (the same body that certifies all mobile phones as conforming to international standards). It is an Ofcom requirement to use such devices in the UK.</p> |
| 12 | Will you keep us updated on progress with regards to potential sites to host the mast in Alexandra Park? | Yes |

STANTON FITZWARREN PARISH COUNCIL – 2nd September 2015

| Q | Question | Answer |
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| 13 | How will the solution ensure the it will be able to support all the customers' capacity? | The solution has been designed to meet a take up level of 50% and has been designed to achieve the superfast broadband speed for those homes within scope of 24mbps even during the busiest times. |
| 14 | What would happen if one of the backhaul links failed? | There are two 10Gb backhaul links plus a contingency 1Gb link planned. If one link was to fail the traffic would divert to one of the other links until the backhaul was available again. |
| 15 | What is the maintenance response time for service calls to a mast? | 4 hours, however many problems can be resolved remotely and not require a site visit, meaning this response time is much quicker |
| 16 | Is it possible to have a dish mounted on a rooftop pole to improve reception and would your resellers be able to provide this service? | Yes it is possible. Normally if a customer wishes to take up this option they would make a commitment to sign up with a reseller who would installation the solution, subject to a site survey which indicated that the committed speed was achievable. |

HAYDON WICK PARISH COUNCIL – 15th September 2015

| Q | Question | Answer |
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| 17 | I am an online gamer and the latency of the network is important to me. What latency performance are you offering and how will this support on line gaming effectively? | Latency on the network will be in the range 10ms-50ms depending on the radio conditions at the location of individual users. |
| 18 | Can you provide details of the radiation emission levels from street furniture style masts? | <p>The technology deployed is the same as for any other LTE (4G) network, although this installation has been deployed specifically to provide a fast data solution. The risks are the same as for any other mobile phone type service.</p> <p>Mobile phones and the masts to support them do emit radio frequency (RF) signals and we do accept that this generates concern for some people. This has been extensively researched over the past 20 years and there is no proof we should be worried.</p> |

NORTH SWINDON LOCALITIES MEETING – 16th December 2016

| Q | Question | Answer |
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| 19 | <p>Given that 4G LTE routers and internet packages are available from a number of existing high street providers is the project attempting to resolve an issues in regards to lack of product that does not actually exist?</p> | <p>UKBN has far more spectrum employed for 4G LTE than other operators (UKBN has 128Mhz vs EE having 40Mhz for example). This will deliver 3 times more capacity and there is no voice layer as one finds in the traditional mobile networks. Therefore UKBN is much better placed than a mobile operator to deploy this service and achieve the busy hour requirements.</p> <p>The UKBN solution is fully accredited by BDUK as a Next Generation Access (NGA) compliant solution unlike other mobile 4G networks</p> |
| 20 | <p>With regards to home working will the product support IPV6 / GRE for VPN (IPsec . PPTP etc) / MS Direct Access?</p> | <p>Yes</p> |
| 21 | <p>Following the presentation of the volumetric map in North Swindon are proposals now to apply for masts near to the original objected locations and if so how much distance has been changed if any?</p> | <p>Some of the masts have moved by up to 100 metres to reduce the visible impact and ensure maximum distance from schools / houses</p> |
| 22 | <p>In the event of project failure what would happen to the existing masts or devices installed in customers' homes? Will someone be under contract to remove them?</p> | <p>In the result that the project does not meet its commercial ambitions this will not reduce UKBN's commitment to deliver.</p> |
| 23 | <p>What happens in the event that a potential customer wishes to have this service but has covenants on their property. Is there an alternative install option?</p> | <p>There are currently no other options available, however UKBN would work with householders on a case by case basis to attempt to relax this restriction.</p> |
| 24 | <p>In the attached article an image claims to show existing Relish speeds in Swindon. Can an explanation be provided as to where the data may be coming from and if it's indicative of real world experience http://www.thinkbroadband.com/news/7180-questions-asked-about-swindon-4g-roll-</p> | <p>These results refer to Relish's legacy network in Swindon town centre that uses a solution similar to that used in London. It is not comparable to the network being deployed in the BDUK project (Superfast Swindon).</p> |

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| | out.html | The BDUK project (Superfast Swindon) is using a totally different network solution that uses outdoor, professionally installed equipment rather than the indoor based self install units the original Relish network in Swindon used. |
| 25 | What should consumers expect as the average monthly cost of the package? | As a wholesale provider, UKBN will not be able to set the monthly price for end users. This will be the decision of the retail ISP. |
| 26 | UKBN's service in London has received mixed reviews, how do we know this service will work? | The service in London is primarily aimed at more mobile residents who do not want to be tied into a contract commitment. The London solution does not use an Outdoor Unit (ODU) and does not make a commitment to achieve superfast speed. With the Swindon contract UKBN are committing to achieve the 24mbps speed, hence the requirement for an ODU. |
| 27 | What market testing did you undertake to understand take up figures in North Swindon | UKBN undertook an understanding of the entire broadband market in the UK and assessed the provision in Swindon vs the rest of the country to identify the likely takeup. |
| 28 | What will happen to the masts if take up is not good in North Swindon? | The masts are part of the contract to supply and as a result will remain for the duration of the contract. Any decision about their future would be made once the contract is complete or the usage is such that a fibre based solution replaces them. The mast do have a considerable resale value within the telecoms industry so they would not be just abandoned. |
| 29 | Would you ever sell the masts to a mobile operator? | The mast are not for sale to a mobile operator as they are required to support the Superfast Swindon project. |
| 30 | Are you committed to supporting the contact for the full ten year period? | Yes. |
| 31 | What level of consumer take-up (as a percentage of residencies) is required to trigger UKBN's commitment to install FTTH? | The contract is dependent on delivering a minimum speed of 24 Mbps to 90% of users in the peak / busy hour. The network capacity to deliver this is function of the level of customer uptake and the level of individual usage. UKBN |

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| | | <p>anticipate given the current growth in data usage at household level that the tipping point to move to FTTH will occur around 40% - 50% penetration. This requires further work to get to a more precise figure as we will need to understand more about the local conditions (road construction and surfacing etc) to truly understand the cost of doing this.</p> |
| 32 | <p>What take up level is expected from the Swindon residents?</p> | <p>The take up across the whole of the intervention zone is expected by UKBN to be 30% and the final milestone payment from Swindon Borough Council will not be paid until UKBN can evidence take up of 9%.</p> |
| 33 | <p>How can you assure us that the masts will not have adverse effects on our children whilst they are at school?</p> | <p>One of the most comprehensive studies was conducted by the World Health Organisation (full details can be found here - http://www.who.int/peh-emf/publications/facts/fs304/en/).</p> <p>This report concluded that there is “no convincing scientific evidence that the weak radio frequency signals from base stations and wireless networks cause adverse health effects”.</p> <p>They also noted that the RF emissions for FM radio and television broadcasting are much higher and that they have been in wide use for 70 years without causing any significant health problems</p> |
| 34 | <p>Will the product have a data cap or AUP that throttles activity?</p> | <p>UKBN will recommend to retail ISPs that they do not impose these types of restrictive practices on their customer base but this is ultimately a retailers decision.</p> <p>Some retailers will impose restrictions to invoke additional charging to subsidise an attractive monthly fee. UKBN would urge customers to read their terms and conditions carefully to make sure they really understand what they are buying.</p> |
| 35 | <p>Will the consumer be able to purchase media "bundles" with telephone and TV</p> | <p>This type of consolidation is done at the retail ISP level rather than the wholesale.</p> |

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| | <p>similar to Sky / Virgin / BT offerings (my understanding is this does not refer to programs on the internet such as Iplayer etc but specifically to the idea of spending a monthly fee to have mixed offerings such as telephone / line rental / TV channels / broadband inside one consolidated billing)?</p> | <p>As a general point the service will support the full range of television services such as Netflix and Now TV which will provide a wider range of content than is normally available on the consolidated curated services.</p> <p>This is normally cheaper outside the curated deals as customers are not forced to pay for content they don't want, although may lose having one consolidated bill. It will also support telephone services such as internet calling for mobile phones and other solutions such as Skype.</p> |
| 36 | <p>Will Relish be a provider and if so is the company a going concern in its current form?</p> | <p>Relish belongs to UK Broadband a subsidiary of PCCW, a listed company on the Hong Kong stock exchange. The Hong Kong Stock Exchange, just like the London one, requires its members to follow a code of conduct on how they report their business interests, including rules on forward looking statements. Like many others, these rules require a continual process of review and disciplines around how investment businesses, such as UK Broadband, are managed and reviewed. Statements in the accounts of UK Broadband, which have to be filed with Companies House as a UK listed limited company have to comply with these regulations.</p> |
| 37 | <p>If Relish is an ISP can they give an indication of what "an alternative business plan" may mean to consumers in Swindon?</p> | <p>There are currently no alternative business plans in development as UK Broadband is on track against its agreed business plan with its owners. The requirement for an alternative business plan would be invoked if UKB was unable to meet the commitments required by its owners.</p> |