Neighbourhood Plan - Fibre Broadband Proposals

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1. It is generally acknowledged that, in an ideal world, every building should have a pure fibre optic connection to the Internet i.e. FTTP (Fibre To The Premises), also known as FTTH (Fibre To The Home) and FTTB (Fibre To The Building/Business/Basement). This will allow connection speed and capacity to increase with future demand without further construction and road-works. It will provide much improved reliability at significantly reduced maintenance cost.
2. Whilst it is technically feasible for suppliers to start the process of provision of FTTP to every building right now, there is no agreement that the installation cost can currently be justified. BT and others are installing FTTP in some areas (locally in Capel and Alfold, for example), where it can be commercially justified or someone is willing to subsidise e.g. a housing developer or Council.
3. The additional cost of installing fibre to new build developments is typically very low. Fibre optic cable is cheap, and can be included in the same ducting as the phone line. Thanks to "Superfast Surrey", fibre has now been run to virtually all street cabinets in Surrey, for FTTC (Fibre To The Cabinet) services, so providing FTTP for new builds will add relatively little to the mandatory cost of installing the phone lines. A few large developments are already being built with FTTP, justified on a purely commercial basis. This proves FTTP installation makes financial sense, but few developers even consider FTTP and any local development is likely to be small, so will need FTTP to be a planning requirement.
4. Failure to require developers to provide FTTP for new builds is very likely to increase the amount of public subsidy needed to improve broadband service in future. The Superfast Surrey team is already looking for funding to upgrade the service to many houses built since their contract was signed with BT.
5. FTTC (also known as "fibre broadband" and "BT Infinity") is a low cost compromise solution, providing a broadband service which is just adequate for the majority, for the next few years. Some domestic subscribers and many businesses or home workers need FTTP speeds and reliability now, and this number will increase very rapidly. As local papers have highlighted, we are already seeing the same road dug up once to install one broadband service or upgrade, then again a few months later to install another.
6. Wireless services are useful for some situations, but cannot provide an affordable stable connection at consistent speed to all premises, nor can it compete with potential FTTP speeds. Trees and other obstacles can block wireless connections. Wireless transmitters can be linked to the FTTP cabling to provide an improved broadband service to some remote premises.
7. Once FTTP is provided to a new development, there is no good reason why the service should not be made available to neighbouring premises, and those along the cable route. However, running a new cable into an existing building usually involves significant cost and perhaps unwelcome digging or overhead cabling. Since the majority do not yet require the service, it seems most realistic for existing subscribers to bear the cost of cabling from the nearest access point, or to arrange the work themselves, if this is possible. Therefore, developer plans should include provision of suitable community access points. Also, the ordering mechanism should allow for cabling costs to be shared amongst several subscribers, and for additional subscribers to join the scheme later.
8. Once the mechanism for FTTP to neighbouring premises is established, the service provider will be keen to expand their customer base into the surrounding area. Other service providers will then look for ways to compete. This will inevitably accelerate the availability of affordable FTTP to all.
9. BT have three distinct FTTP products which could be considered for use in this context; "Native FTTP", "Private Fibre" and "FTTP on Demand". We can rule out "Private Fibre" because it is based on a contract for specific premises; the contract does not allow further premises to be added later. "Native FTTP" contracts work in the same way as existing services, although the choice of ISP is currently more limited (AAISP, BT, IDNet and Zen, but others will join them as demand increases). "FTTP on Demand" is not appropriate for installation during development, so is not relevant to planning. BT sometimes say that

Native FTTP is not necessary because the resident will be able to order FTTP on Demand later. However, the latter product is simply too expensive, because each subscriber pays a large proportion of the cost of running fibre from the FTTP "node" (near Sayers Croft in our case). In any case, the product has been "suspended" and there is no guarantee it will ever be available here. Native FTTP is offered at similar prices to FTTC for the 80/20 services (80 Mbps download, 20 Mbps upload), but with FTTP every subscriber will get that speed, whereas with FTTC most subscribers actually get much less (depending on distance from their cabinet). At present the BT FTTP services go up to 330/30 Mbps (again that is the speed you get), and this can increase further in line with demand.

10. Other FTTP suppliers offer various maximum speeds, in some cases 1000/1000 Mbps at a similar price to FTTC, which is particularly ideal for businesses needing fast uploads. However, there is often no choice of ISP, so no competition, and sometimes the fibre service replaces the installation of traditional phone lines. Experience tells us that, whenever possible, residents should have a choice of communication services; for example, an elderly resident may require a telephone but no Internet, and low income families may need the lowest cost broadband service possible. It is important to address this issue in any planning requirements.
11. The UK Government target is now aligned with the EU at 100 Mbps download "affordable" availability. It seems almost absurd that planning applications are still being granted with no mandatory provision for broadband at all, let alone a service at that level. Right now 100 Mbps can only realistically be achieved by FTTP or cable (provided by Virgin) services. BT have announced that their FTTC services will be able to achieve this "soon", but are less keen to add that this only applies to premises very close to the cabinet.
12. Planners often appear to assume that BT's legal obligation to provide a telephone line means that reasonable broadband service will also be available. Currently BT are only obliged to provide a dial up service of around 0.1 Mbps. The Government has plans to increase this Universal Service Obligation (USO) to 5 Mbps in due course, but 5 Mbps is already inadequate for many situations, and speed requirements only move in one direction. Likely housing development sites will often be outside the centre of the community, which usually means a long distance from the nearest cabinet, and thus poor or no FTTC service. In addition, our own fibre cabinets are all very close to available capacity. Whilst we have observed BT Openreach automatically providing additional cabinets to meet demand elsewhere, there is no guarantee they will do so in future for a small new development, even if close to the cabinet.

To summarise these proposals; all plans for new build development, or substantial conversions, should include provision for both affordable "native" FTTP and traditional phone lines. The FTTP should be designed to allow neighbours and those en route to access the service at reasonable cost and at any time, with a choice of ISP (unless the community forms their own ISP, perhaps). It should also be capable of being expanded to cover the surrounding area when funding becomes available, and to include wireless services where appropriate.